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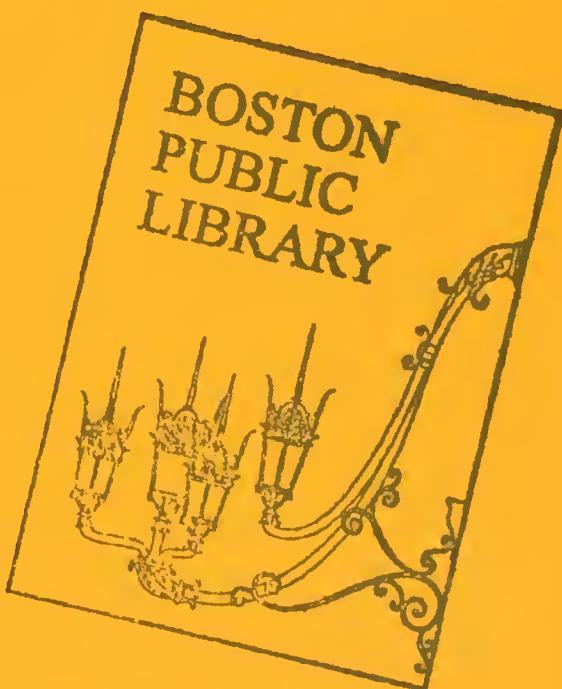
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INDUSTRIAL PARK



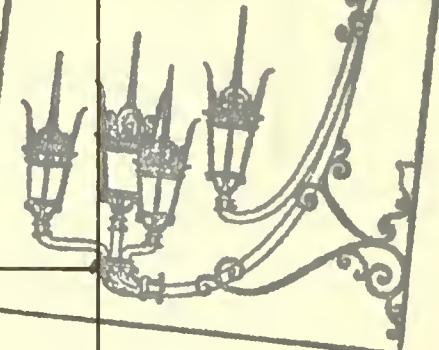
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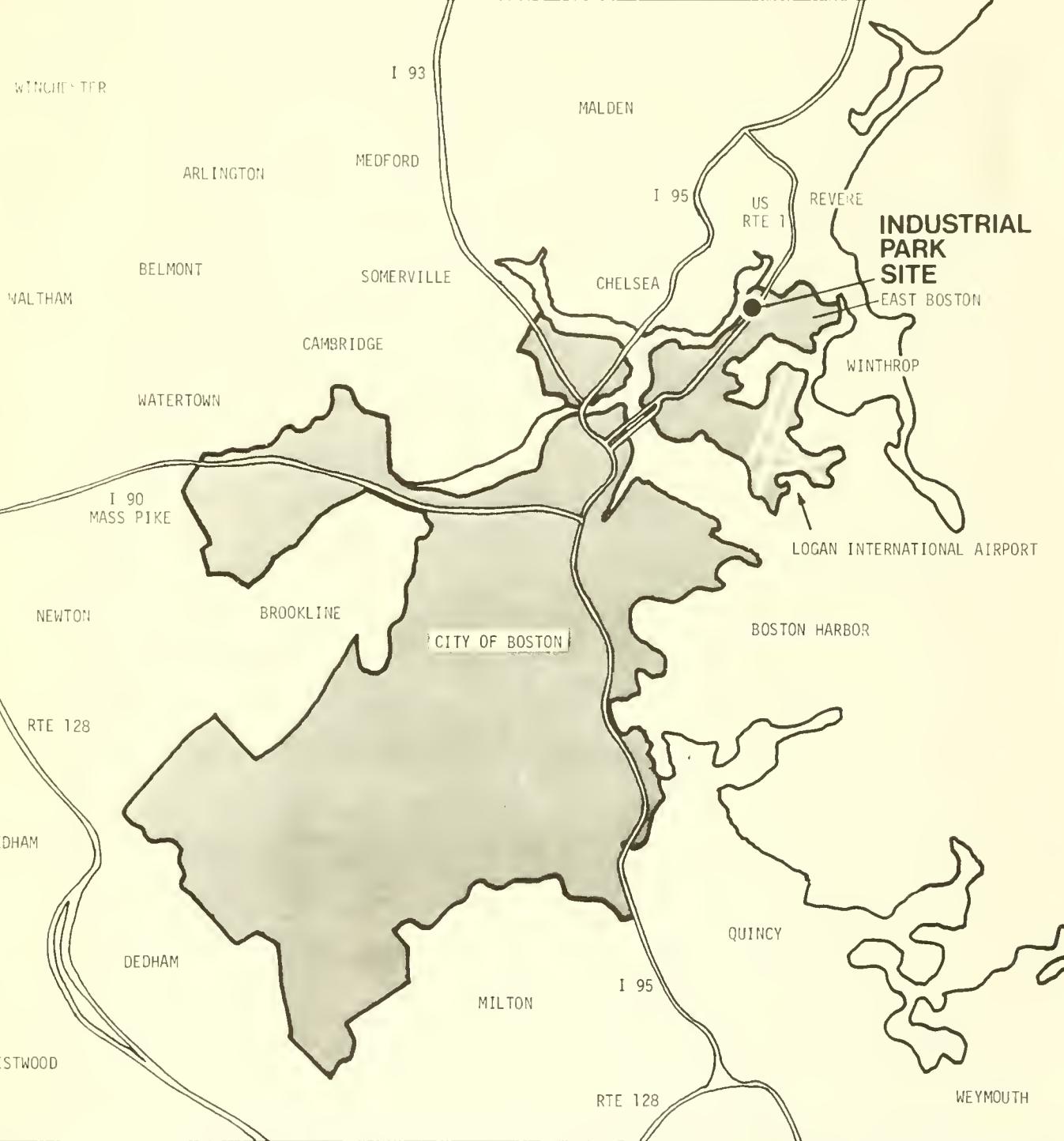
JOHN BROWN ASSOCIATES
COMMUNITY PLANNING AND DEVELOPMENT

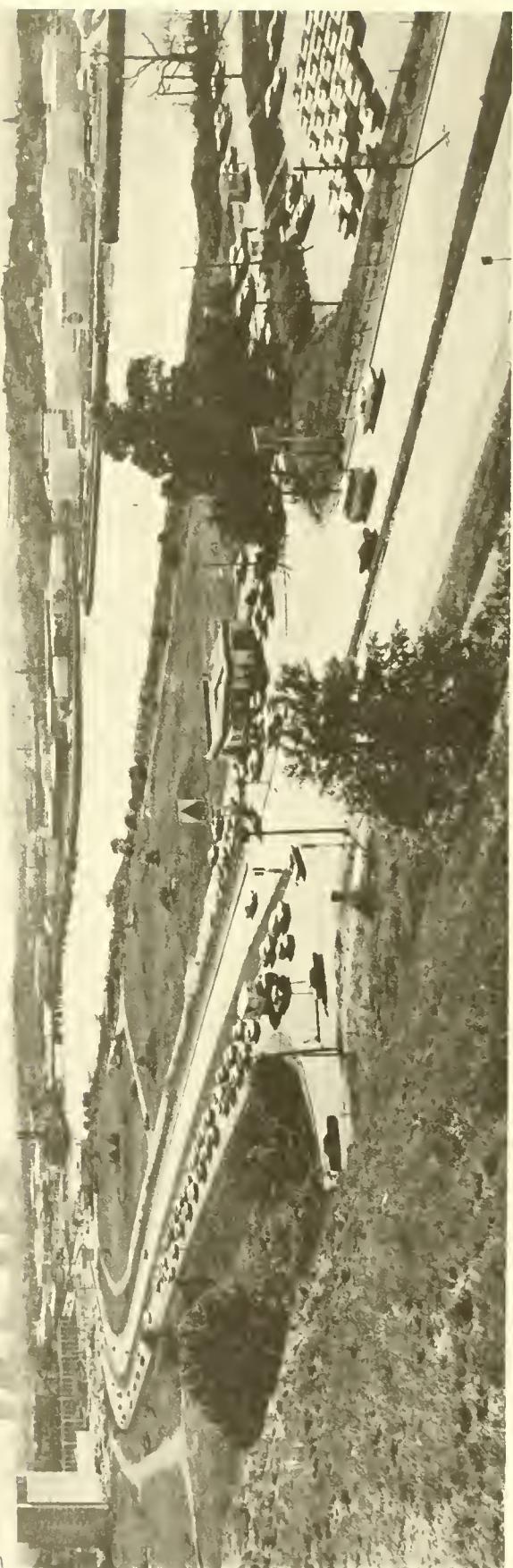
AUGUST 9, 1974

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EAST BOSTON INDUSTRIAL PARK

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INTRODUCTION

East Boston has made good progress in planning for community development in recent years. Through community involvement and constructive participation, the people of East Boston have demonstrated that a community can gain some semblance of control over its destiny.

The East Boston Community Development Corporation has been actively involved in seeking to uplift the economic status of East Boston citizens. Through their various projects, and specifically in projects related to real estate, they have demonstrated that they will be one of the major mechanisms for the community to control its own "turf" - and in the last analysis this may be the most important type of control the community will seek.

During 1972-73 the CDC prepared a community-wide plan and proposals for key sites. The NDP II site for residential and business use on the waterfront was one such key site; another was the so-called Boston East site on the Border Street waterfront; a third was a proposed park on the Chelsea River. Another was the site that is the subject of this report. The full potential of the industrial park site was not evident at that time although the CDC took steps to advance feasibility studies.

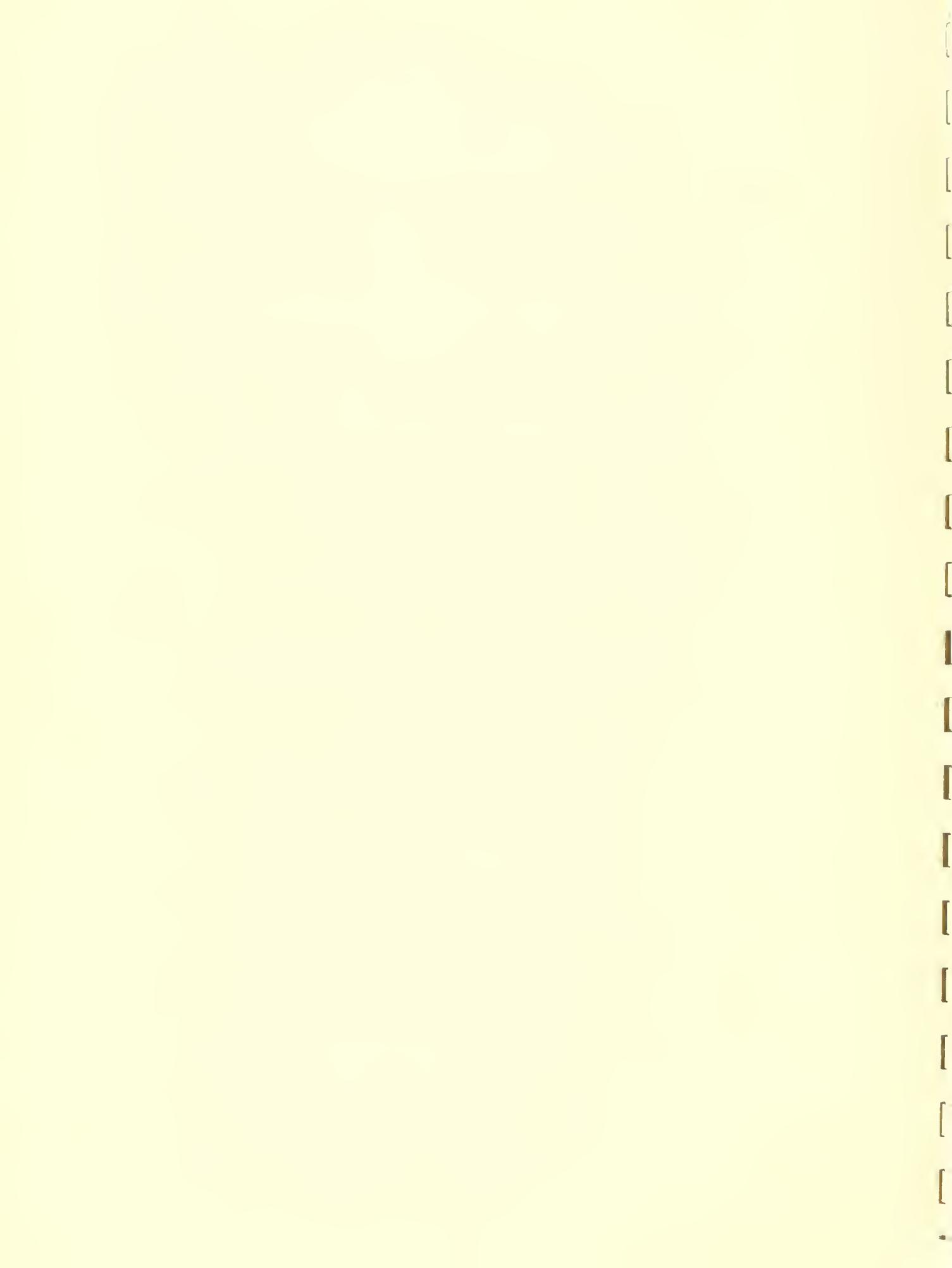
These studies have now been completed. Coincidentally, studies were being undertaken by the City of Boston's Economic Development and Industrial Corporation for this site and others in the city. We have had excellent cooperation from the staff of EDIC and we believe our recommendations will closely parallel those of EDIC, although their final report has not yet been completed.

The report which follows is separated into four major sections. The first presents a summary of our key findings and recommendations. The second section is the most lengthy because it deals with the major questions of development feasibility. Section III discusses environmental design concerns and relationship of the industrial park to the community. The final section presents alternative roles for the CDC in the development of the industrial park and recommends a specific development strategy.

Consultants assisting John Brown Associates included Stanley T. Siegel (traffic engineering), Richard Jay Bertman (architecture), and Richard A. Siegel (regional economics) and Isabella Ballard (real estate).

I. SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

1. The subject site is physically capable of being developed as an industrial park. Of the total area of 54.7 acres, approximately 32 to 35 acres is hard land and the remainder is water or mud flats.
2. All but six acres is owned by Grossman Development Properties, Inc. of Braintree, Massachusetts and is presently being offered for lease. A memorandum on the estimated value of the site is being delivered under separate cover.
3. Soil conditions on the site are poor since most of the area was filled. One story buildings will require spread footings (or possibly piles) and buildings higher than one story will require piles. Further detailed studies of soil conditions are recommended prior to making firm commitments on the site.
4. The existing fuel tanks on the site are not expected to create any undue problems. Total removal of these tanks will probably be unnecessary but the tops should probably be broken off to avoid elevation problems.
5. The site is well located with reference to markets, labor, transportation and other key requirements for industrial development. Few, if any, comparable sites exist in or near the City of Boston.
6. The site has good highway access and display potential, rail access, deep water access and is within five minutes of Logan International Airport.
7. Utilities are either available at the site or can be brought to the site to serve customer needs.
8. The site is indicated for industrial use in the East Boston Community Development Corporation's General Development Plan and is zoned industrial. It is separated from residential areas by natural and man-made barriers, eliminating potential land use and environmental conflicts.



9. A market for industrial land at this location exists and can be exploited with proper merchandising. The East Boston Community Development Corporation as developer would appear to have certain unique advantages over the ordinary private developer in marketing this land due to its role in the community and the increasing sense of social responsibility becoming evident in many industrial corporations.
10. The Community Development Corporation's role in this industrial park could take a variety of forms. We recommend that the CDC seek to assume the role of developer of this project either alone or in partnership with other public and/or private parties.
11. Financing is available, depending upon specific project needs, from a variety of sources including private capital, the Economic Development Administration, the City of Boston's Industrial Development Financing Authority, the U.S. Department of Labor, one or more state agencies, and the CDC's own funds. Although a detailed financing plan cannot be drawn until the precise program for the site is known, a number of methods of potential financing appear feasible.
12. The CDC's involvement in this site, if any, should relate directly to its goals in overall community development, particularly the improvement of employment opportunities for East Boston's labor force.

II. DEVELOPMENT FEASIBILITY

The potential for success of an industrial park at the location under study depends upon a number of considerations. These include an understanding of the present status of the site, site problems and potential site preparation costs, marketability and economic viability and methods by which the project can be financed.

A. Present Status of Site

Ownership and Area. The owner of the major portion of the land on the west side of W.F. McClellan Highway, East Boston, which runs from approximately opposite Addison Street to the Revere line and from the highway west to the Chelsea River, is Grossman Development Properties, Inc. of Braintree. Five parcels are owned by others: 14,500 square feet owned by Gulf Oil; 43,083 square feet owned by Riley's Roast Beef; 5,953 square feet owned by Nordblom (Citgo Service Station); 26,500 square feet owned by the B & M (excluding their major right-of-way) and 237,584 square feet owned by DeMatteo Construction. We recommend the inclusion of all these parcels in the industrial park except for the Gulf Station and Riley's Roast Beef (Baker's Dozen) which are at the extreme southern end of the area and are not essential to the development of the area as an industrial park.

The total acreage transferred to Grossman Development Properties by the G.S.A. in 1964 constituted land on both sides of the highway totalling 79.62 acres. The land area on the west side of the highway under this ownership amounts to 2,145,201 square feet or 49.25 acres. The total assessment on the land was \$897,000, in 1973 or at the rate of 41.8¢ per square foot. Some of this land is wet land along the Chelsea River. For comparative purposes the 5.5 acres of land owned by DeMatteo which lies along the highway and runs only to a depth of 350 feet had an assessment of 50¢ per square foot.

In addition to the land there is a one story repair and maintenance garage built in 1966 with additions. One was put on in 1968 and the second in 1971, the total area of which amounts to 29,400 square feet. There is also a one story building of approximately 10,000 square

feet used for the storage of parts which was built in 1968. The total assessment on these buildings was \$25,000 (1973 assessment). No assessment is made on the underground storage tanks on the several parcels.

The land owned by Grossman is made up of roughly four parcels. The first (I) is a site of approximately 506,522 square feet or 11.6 acres. It is generally rectangular in shape and has 1,600 feet of frontage on the highway, and an average depth of 400 feet to the railroad tracks along the rear. The abutting property on the south belongs to Riley's Roast Beef. There are five underground reinforced concrete oil storage tanks covered with 6 or more feet of earth.* Thus, the terrain is mounded to a height of 15 or 20 feet over each tank. The grade, however, is not so steep that in most cases a vehicle could not be driven over it. In conjunction with the tanks are numerous vent pipes, manholes and small concrete pumphouses. There is also a paved roadway which provides ready access to the interior of the parcel. There are two connectors to the highway from this road, each at grade with it. The unfenced access onto the parcel from discontinued Boardman Street is 20 feet or so above the general grade of the roadways serving Parcel I. Spur tracks from the B & M railroad which are on the site have been abandoned and are partially dismantled.

The second parcel (II) consists of 317,516 square feet of land at the northwest corner of discontinued Boardman Street. There is approximately 1,000 feet of frontage on the highway, 650 feet along the rear which abuts the railroad tracks and an average depth of 350 feet. Since there are three underground tanks on the site, the terrain is "hilly" as on the site just described to the south of it. In 1966 a 17,400 square foot one story concrete block building designed as a repair garage was constructed here. In 1968 a 1,600 square foot extension was made and in the same year a 10,000 square foot one story concrete block storage building was constructed. In 1971 a second addition to the original repair garage was made consisting of

*

The tanks are approximately 100-120 feet in diameter and 20 feet high.

10,400 square feet for auto body shop use. This parcel and its improvements are known as Auto City and periodic car auctions are operated on the site. Paved roadways give access to some portions of the parcel.

The third (III) parcel is to the rear of the second parcel. It is generally rectangular in shape and lies between the railroad tracks and the Chelsea River (area = 804,000 square feet). There are three underground tanks on this site, but due to the fact that at the time of installation they were completely buried, the land is level. There is also a paved roadway as shown on the map. On the rear of this parcel are old pilings indicating that at one time there was an old wharf here.

The fourth portion (IV) of the property is an area of 527,424 square feet with frontage on the Chelsea River which is wet land and extends in some places almost to the channel line and as far north as the Revere city line. Some old piling is still evident, close to the north rear parcel, but any bulkheads and piers which may have been in existence have been destroyed.

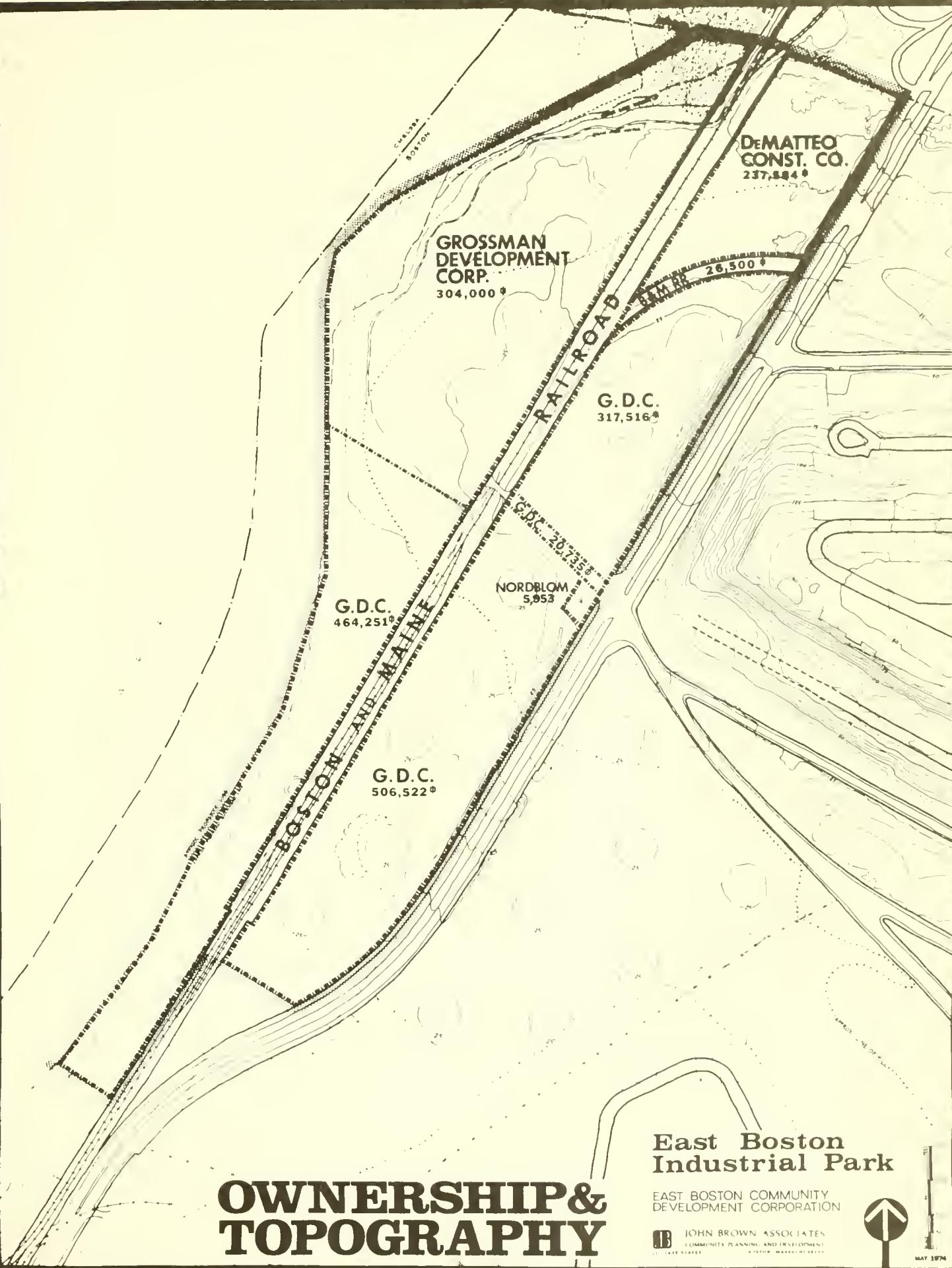
Availability of Land. The parcel designated as (I) with the five tanks and frontage on the highway is for lease.

The parcel designated as (II) with three tanks is presently under a 15 year lease to Joseph O'Connor.

Parcel (III) with three tanks lies between the railroad tracks and the Chelsea River and is for lease.

The wet land on the southerly edge of the parcel (IV) lying between the railroad tracks and the river is owned by Grossman's and could be included in a lease for the other parcels.

The parcels for lease amount to approximately 22 acres of hard land. The terms which the owner is desirous of obtaining is \$100,000 net after taxes (this comes following a tax abatement so that the full taxes on the parcels are \$37,000). This would be a long term lease in which there would be an economic escalation clause so that the



lessee would be responsible for periodic cost-of-living increases. In return for this net, the owner (Grossman) would test the tanks and bring them to operating standards, and would bring into working order the interlocking piping between the eight tanks. It would be the lessee's responsibility to get all fuel storage permits, Coast Guard docking approvals, and make his own arrangements for loading, whether that be by water, rail or truck. Storage capacity in these eight tanks is 208,500 barrels.

Discussions with the owner indicate that he would prefer to lease the property rather than sell it but that he is open for further discussions on this matter.

Summary of Property Suitable for Industrial Park. It would appear that all of the property west of McClellan Highway is suitable for inclusion in the proposed industrial park with the exception of Baker's Dozen, the Gulf Station, the riverfront parcel owned by Ramada Inn, and the railroad right-of-way (although consideration could be given to acquiring the railroad right-of-way and providing an easement back to them). The property east of McClellan Highway is not included for industrial use at this time although a portion of it may be suitable for future nonresidential use (see General Development Plan).

The properties included in the industrial park at this time are as follows:

<u>Owner</u>	<u>Area</u>		<u>Acres*</u>
	<u>Sq. Ft.</u>		
Citgo	5,953		0.1
Grossman	2,113,024		48.5
DeMatteo	237,584		5.5
B & M Spur	26,500		0.6
	2,383,061		54.7

*

This includes water areas and mud flats estimated at 20-22 acres leaving net hard land at 32-35 acres.

B. Site Preparation

Soil Conditions and Drainage. In 1949 and 1950 the Boston Society of Civil Engineers* took borings in East Boston. The locations of these borings were confined to the unfilled areas and with no borings on the old Navy Fuel Depot Site. The closest locations are about 500 to 2,000 feet east of the B & M rail line. However, given that most of the subject site (except for the area on the western foot of Orient Heights) was marsh, the boring results summarized here are assumed to be typical for the area.

In general, there is a surface layer of peat and/or silt from 2 to 15 feet deep, then an 8 to 20 foot deep layer of blue clay. Fine sand exists underneath the clay layer at a depth of 20 feet below the surface at two boring locations furthest from the site. Two boring locations closer to the site penetrated down 40 feet finding only clay.

For the portion of the depot site at the foot of Orient Heights (near Auto City) detailed information on subsoil conditions is unavailable but it is quite possible there is an underlying layer of bedrock.

At least 15 borings were drilled in 1968 - 1970 to depths ranging from about 55 feet to 144 feet on the current site of the Ramada Inn. Consistently throughout the site water was found at 2'0" to 5'6" below grade, and a coal and cinder fill was found just above the water table. Below the fill the natural soils consist of peat, fine sand or silt usually at a depth of 20 to 25 feet below which are deep layers of yellow and blue clays and veins of sand. This site along with most (75%) of the proposed industrial park was created by pre WW II fill operations closing off part of the Belle Isle Inlet. As such, it is assumed that the soil conditions on the Ramada Inn Site are fairly typical.

*

Boring data from Greater Boston, Boston Society of Civil Engineers, 1961.

Two points are worth noting about the construction of the Ramada Inn: the original concept of a two-story motel-like operation was scrapped in favor of a tower scheme because of high foundation costs and the need for piles.

Our foundation consultants, Childs, Bertman Tseckares Associates and Cleverdon, Varney and Pike, believe that one-story buildings on the industrial park site can probably be supported by spread footings with columns spaced at 20 to 25 foot intervals. Buildings higher than one-story would require piles. Friction piles 50 to 60 feet deep would probably be required to support 2 to 5 story construction. It is possible that even one-story construction could require piles. This would probably make the project questionable in terms of feasibility.

The cost of 50 to 60 foot piles would increase foundation costs \$2.50 to \$2.80 per square foot of floor area over normal foundation costs. Normally, industrial uses would not support such additional costs and we would not anticipate exceeding one-story except where the use would clearly support the additional cost.

Square foot rental costs for nonresidential use vary depending upon the precise nature of the use. Rates for older manufacturing property and warehousing may be as low as \$2.00 per square foot. New office space rates are being quoted up to \$15.00 per square foot. For manufacturing, wholesaling and service industries in new space we would anticipate a range of from \$2.00 to \$5.50 per square foot with manufacturing at the lower end of the range and wholesaling and service industries at the upper end (a combination regional sales office and distribution center, for example, might even exceed the \$5.50 level).

Further studies in this area should be pursued prior to making firm commitments on the site because overall financial feasibility could be effected if costs for foundation work were increased sharply over the estimates contained herein (as shown in Table 5 near the end of this report).

Drainage is not considered a problem on the site because surface water can be discharged directly into the Chelsea River.

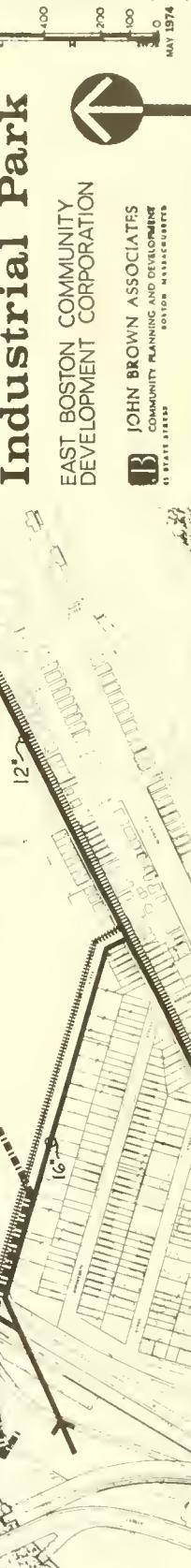
EAST BOSTON COMMUNITY
DEVELOPMENT CORPORATION

JOHN BROWN ASSOCIATES
COMMUNITY PLANNING AND DEVELOPMENT
BOSTON, MASSACHUSETTS



MAY 1974

East Boston Industrial Park



COMBINED
INTERCEPTOR
SEPTIC LINE
WATER MAIN
GAS MAIN

UTILITIES

Underground Fuel Tanks. The location of the fuel tanks on the site are shown on the accompanying map. Background information on the history of these tanks is contained in the previous section of this report.

The tanks are constructed of reinforced concrete and are shallow drums in shape. Five tanks each of 35,000 barrel capacity have a 120 foot diameter and six other tanks each holding 27,500 barrels have a 100 foot diameter. The inside depth of the tanks is 20'6". Three quarters of this depth is below the surrounding ground level in most cases.

On top of the tanks is 4 feet of earth fill which is sloped around the sides to meet the existing grade. Various pump enclosures and hatchways penetrate the top fill. The side walls of the tanks varies in thickness from about nine inches at the top canting out to about eighteen inches at the bottom. The top of the tank is generally about nine inches thick and is supported at the edge and by eight inner columns. Twelve and sixteen inch pipes, connecting the tanks and various substation housings to loading points at the railroad siding and the Chelsea River, are buried just below the ground surface.

There are two approaches to dealing with the tanks as obstructions to new construction.

1. Complete removal entails excavation around the tank and scraping off the 4 feet of top fill. Demolition of the reinforced concrete wall and top might then be accomplished with conventional wrecking techniques.
2. The possibility of crushing the tank inwards leaving the wall and top refuse lying on the bottom depends upon the necessity of building upon these remains and the feasibility of penetrating the refuse if piling is required for new construction. This is discussed further below.

Under either method, complete removal or crushing in, some 2,500 yards of additional fill would have to be dumped in each remaining hole to continue the level of grade. It is estimated by EDIC's consultant that the cost of complete removal of each tank would be about

\$80,000. The method of crushing in the top portion (the approach that Ramada Inn used) is estimated at \$20,000 for each tank by EDIC. Our foundation consultants, Cleverdon, Varney and Pike, who also were the consultants on the Ramada Inn construction, confirm these figures as realistic.

We believe that it will not be necessary to remove any of the tanks but that we can fill or span over them with small columns built up to take floor loads. Due to elevation problems, we would probably want to break off the tops of the tanks or fill the surrounding areas in order to provide a level site (unless site design could use one or more of the mounded areas as a design feature). If only the tops are removed the cost would probably be less than \$20,000 per tank.

Utilities. Electric and telephone service can be readily brought to the site as needed by site users. Sewerage, water and gas justify further comment. Costs for improvements are presented later in this report.

1. Sewers

The industrial park site does not now have sewer connections. However, there are two lines that terminate on Boardman Street with one crossing to the west side of the McClellan Highway. These two sewer lines tie into an interceptor which collects sanitary and storm lines and runs to the southwest through Brandywyne Village to the MDC Wharf on the Chelsea River and then to Deer Island for treatment.

At present, Baker's Dozen relies on a septic tank; Auto City ties into the city sewer but details of such tie-in are not clear. Ramada Inn ties directly into the interceptor by crossing a neighboring property.

The twelve inch line that terminates at the property line (at Boardman and McClellan) has an invert elevation (bottom of pipe) of 19.4 feet (Boston City Base). The portion of the site that is south of the extension of Boardman has an existing ground elevation ranging between 18 and 20 feet (Boston City Base) with the tanks jutting up to 29 feet. The northern portion (Auto City) is higher at about 35 feet elevation

(Boston City Base) but slopes off to 20 feet at the northernmost end. The western portion of the site across the railroad has a ground elevation of about 20 feet (Boston City Base) near the river with the part closest to the tracks being above 30 feet elevation. In summary, most of the site, except for Auto City and the land directly across the tracks from it, is at about the same elevation at ground level as the nearest sewer pipe is. Gravity feed for most of the site is precluded. There are several possibilities for providing septic service to the low lying portions of the site:

- As part of site preparation install a trunk line down the middle of the site (under a private way open to public access) which would connect to a tank and ejector (pump) near the existing sewer line at Boardman and McClellan.
- Install a line along the McClellan Highway. Each building might then tie into the new line by providing their own ejector system as required.
- Fill the site to a level high enough above the existing line at Boardman and McClellan to provide for a gravity feed line to that point. With a pitch of 1/4" per foot required, an additional 30 feet of fill would be necessary at the southernmost portion of the site.

2. Water

There exists a 12" water main running along Boardman Street to a termination at the railroad on the west. Presently Auto City is served by a connector from this main as is Ramada Inn. In addition there is another 8" main running up the west side of McClellan Highway, terminating just south of the site, serving Baker's Dozen.

Depending upon the demand generated by the industrial park there is doubt as to whether the Boardman main is of sufficient capacity. If there are only domestic needs for water, sufficiency probably exists. If, however, there is an industrial process use of water the present 12" main would probably not be able to handle the demand. There are two possible means of augmenting the existing on-site water supply:

- Extend the main that terminates at Baker's Dozen on up the McClellan Highway to connect with the Boardman main and possibly beyond to another 12" main at Waldemar Avenue.
- Extend the main now serving Baker's Dozen a short way up McClellan Highway and into the site. Beyond the property line mains and feeders could be provided as part of site preparation.

Water pressure is considered adequate for normal use according to the Boston Water Department.

3. Gas

There exists a Boston Gas Company main running along Addison Street from Saratoga Street, and up the McClellan Highway to service Baker's Dozen. While there are no other gas lines in the immediate vicinity of the site it is anticipated that if sufficient demand is generated service can be provided for any portion of the industrial park.

Site Access and Related Issues. Access to the site from McClellan Highway, access to Chelsea Street, the possibility of MBTA use of the B & M right-of-way, the Winthrop Connector, and improvements to McClellan Highway are discussed below:

1. Access from McClellan Highway

- At Boardman Street - The intersection of McClellan Highway and Boardman Street is presently signalized. The existing signal allows vehicular movements out of the site, but does not allow left turns into the site for northbound traffic. The signals are primarily for the purpose of allowing southbound traffic on McClellan Highway to turn left into Boardman Street and for traffic on Boardman Street to turn left onto McClellan Highway.

It is suggested that the major access to the site be at this location and that the signalized intersection be re-designed for the purpose. Both the physical location and design of the signal hardware and the timing and sequence configuration of the

control equipment should be revised to fit the geometrics of the entrance-exit design and the volumes of the various movements proposed. An important part of this modification should be the provision of a left-turn slot for northbound traffic on McClellan Highway. There are precedents for these kinds of modification, with prior approval of the Massachusetts Department of Public Works. It is urged that these modifications be part of the original design, and not added as an afterthought.

- Northerly End - Near the northerly end of the site is a so-called "jug-handle" intersection, signalized for the purpose of providing a place for southbound vehicles on McClellan Highway to reverse direction. It is suggested that an entrance-exit access to the site can be located in this area and the signalized intersection be modified to handle the revised operation, if needed by industrial park traffic. This access should be designed to provide for movements to and from the north, with no provision for left turns into the site from McClellan Highway. Southbound traffic could be routed into the site by means of a right turn off the jug-handle, and northbound traffic out of the site could be routed so as to make a right turn onto the jug-handle and thence left to the north.
- Southerly End - Near the southerly end of the site, McClellan Highway curves toward the river. It is suggested that this curve can be the location of an exit for southbound traffic only via an acceleration lane similar to an entrance ramp on an expressway. Both sight distance and existing geometrics of the area appear to favor such a design.

2. Access to Chelsea Street

At present, there is a connection between McClellan Highway and Chelsea Street known as Curtis Street.

It is closed at this time for repairs to the bridge over the railroad. (The Massachusetts DPW indicates that this bridge will be advertised for repairs in August 1974 and should be open by January 1975). A direct connection from the site to Chelsea Street is physically possible, but the feasibility is questionable. It would be necessary to cross the railroad running parallel to the site, run on fill or structure for several hundred feet, cross the other railroad which runs between Chelsea Street and the M.D.C. sewer wharf, and intersect Chelsea Street between Curtis Street and the river. It would appear that the cost of such an access would be prohibitive, and that monies might be much better spent in providing a high-speed access from the site to McClellan Highway southbound, and modifying the intersection of Curtis Street to facilitate an easier right-turn at that point.

3. B & M Railroad Line

The M.B.T.A. is preparing to request proposals for the study and design of the Blue Line extension to the north. Part of this study will require investigating alternative and/or complementary railroad service on the existing B & M right-of-way. Planning personnel at the M.B.T.A. feel that the use of the B & M tracks is a real possibility. This possibility is strongly favored by Lynn and this attitude is reflected in some of the other communities further north. No decision has been made, and probably will not be made for at least two years. Proposals from design consultants, requested earlier this year were returned and it is expected that a new RFP will be sent out sometime in the near future. It is suggested that site development proceed on the premise that both passenger and freight traffic will be routed on these tracks.

The possibility of obtaining a stop on a future rapid transit line in this area appears remote, according to M.B.T.A. personnel. This is due to the fact that the riders generated by such a stop would probably be insufficient to justify a stop due to the location of other nearby transportation facilities. As an example, they cite the consideration now being given to eliminating the Savin Hill Station on the Red Line because

riders are down to about 1,800 per day. They also cite the 4,500 rider level at the North Quincy Station as an example of a level of use justifying a station.

4. Winthrop Connector

Discussions with representatives of the Massachusetts Department of Public Works indicate that this project is not dead, but it is now very low priority. It is not likely to be pressed unless there is a major change in community attitudes in the area, and such a change appears to be an extremely remote possibility at the present time. Even if the project were to be released for development, it would be in excess of ten years before it could be implemented. The development of the Industrial Site should proceed on the assumption that the Connector will not be built for many years. No plans for the Connector beyond those prepared by the BTPR are available at this time.

5. McClellan Highway Improvements

There are no present plans for the upgrading of McClellan Highway. The possibility of routing I-95 here still lurks in the hearts and minds of some transportation planners, but is realistically only a remote possibility. The potential connection to the Third Harbor Crossing is another remote possibility, but is contrary to the stated purpose of the current tunnel proposals which terminate at the airport. Site planning for the industrial park should provide sufficient setbacks to allow future upgrading of McClellan Highway without serious disruption to the proposed industrial development.

Average duty traffic (ADT) on McClellan Highway is approximately 40,000 cars per day. Peak hour traffic is approximately 10 percent of ADT (or about 4,000). The present traffic represents approximately 50 percent to 75 percent of the capacity of the highway. If 500 cars were parked at the industrial park site they would add to the ADT by about 1.2 percent and the peak hour traffic by about 12.5 percent. Even if only 25 percent of the peak hour capacity remains (say capacity for an additional 1,333 cars) the proposed 500 cars in the industrial park would use less than one-half of the remaining capacity.

C. Economic Viability and Marketability

This section of the report discusses the economic aspects of developing the industrial park. We discuss below the locational advantages of the site, potential industries and jobs that can be attracted to the site, and the probability of the absorption of land placed on the market for industrial use.

Locational Advantages. The East Boston Industrial Park is well located with relation to markets and labor, being within the core of one of the major manufacturing areas in the United States. Transportation is also excellent, as discussed below.

1. Highway Transportation

The highway access to the subject site is good. As can be noted on the accompanying maps, the site has direct access onto Route #1 - W.F. McClellan Highway, and has access north to I-95 via Route #1, to Interstate Route #93 via Route #16 - Revere Beach Parkway; access to Boston and the South Shore area, and to the west (Massachusetts Turnpike - Interstate Route #90) is via the Sumner and Callahan Tunnels.

At present the tunnel system is over-burdened and studies for additional tunnel facilities are being made. Highway traffic is heavy on Route #1 during commuting hours, as it is near many good industrial sites. The proximity of Suffolk Downs Race Track is considered disadvantageous but not overwhelming. The track has 200 days of racing - January 19 to July 7, and September 22 to December 22, and operates from approximately 12 noon to 5:00 p.m. daily during this period. One-third of these days, however, are on weekends, when traffic is lighter. The site also has good display potential from the highway.

2. Rail Transportation

A Boston and Maine railroad line cuts through the subject property as can be noted on the accompanying

maps. According to the B & M, this line is used about three times per week and is available for industrial use. Mobil Oil and Belle Steel are the primary users. The line connects to another Boston and Maine line north of the site in Revere and to a Penn Central line just south of the site. Further connections to destinations north or south of Boston can be made without difficulty. The M.B.T.A. is currently studying the possibility of locating an express rapid line. This is discussed further under site access in Section B on page 14. In any event, it is anticipated that the rail line will remain, even if located within a narrower right-of-way. The availability of rail to industrial sites in the Greater Boston area has not generally had great impact during the past decade. It is our opinion, however, with present gasoline shortages, rail access will be of increasing importance to some industrial users who can efficiently and economically transport large volumes of heavy materials in this manner.

3. Water Transportation

The subject site extends almost to the channel line of the Chelsea River and at one time in the past, pier facilities existed on the site. A thoughtful review of industrial waterfront activity and development along the Massachusetts coastline has been made and with noticeable exceptions such as Massport, the Navy Yard and other government related users, waterfront properties are no longer developed for industry but rather for recreational and multi-residential uses. Not included in this review are oil storage facilities.*

Many waterfront acres once used by industry stand idle today, - some have good docking facilities. It is our opinion that the supply of such land outstrips the demand, and that for this reason, although the location of the Chelsea River may be an added amenity to the subject site, demand for waterfront access is too low, development costs too high, and permission to act too time consuming to make water

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Boston Seaport 1970-1990 - prepared by ABT Associates, Inc. for the BRA(1970) stated that petroleum trade accounts for 90% of the total Port of Boston traffic.

oriented industrial uses for this site high priority at this time unless such use were tied to the use of oil storage or were related to new uses proposed for the Boston Naval Shipyard and Annex. Also from the long term view, one would anticipate that cargo vessels of the future will be larger than the older ones now in use and that the circuitousness of the Chelsea River channel would put this site in a less competitive position than ones closer to the open harbor. The area now composed of tidal flats would remain available for docking or wharf facilities should a demand for water access appear; no short-range use of this area is proposed at this time.

4. Airport Transportation

The proximity of the airport to the subject site is certainly advantageous. Massport reports a 400 percent increase in air cargo pounds handled at Logan between 1960 and 1972.* The total domestic and international cargo handled in 1973 was 336.2 million pounds. Air cargo handlers occupy a significant amount of industrial space in East Boston. The manufacture or handling of high value, low volume goods on the subject site would appear to be a requirement to make use of the airport facilities of significance and value to a manufacturer. There are also numerous airport related service functions which could be carried on in such a location which would be feasible uses for the subject site. Thus, its location gives it a distinct advantage over less conveniently located sites.

5. Public Transportation

Public transportation via Bus loop #123 to the Blue Line Orient Heights rapid transit station - Monday through Saturday, and additional transportation via Bus #200 is available to the labor force resident in East Boston and a large portion of the metropolitan population. We consider the site desirably located for access to local and regional labor. Further comments on transportation are contained in Section B.

Potential Industries and Jobs. Discussed below are several elements and considerations for a program to attract desirable tenants to the industrial park. We include an

* Source: Massport, Logan International Airport Operations Summary, 1960-1972

assessment of the general trends of the Boston economy and the implications of those trends on park development. We also discuss briefly the approaches best utilized to attract tenants to a publicly organized industrial park.

1. Capital Outlay and Boston's Economy

East Boston is fortunate to be a portion of a city that has a promising economic future. The picture of stagnation and shrinkage painted by many people to characterize the fortune's of U.S. central cities, including Boston, must now be considered obsolete and out of date. Boston suffered from economic reversals and population outmigration during the 50's and early to mid-sixties. This pattern however, has reversed and future levels of employment and investment in all major industrial and commercial sectors should be higher than those existing at present.

Table 1 illustrates some of the evidence utilized by persons concerned about the Boston economy that underlie our positive remarks about the City's economic future. Table 1's capital outlay figures represent estimates of investment in new construction and alterations and additions of and to structures as well as purchases of machinery and other equipment. The table was prepared by the Research Department of the Boston Redevelopment Authority as part of the new general plan for the City.* Though the figures are preliminary in nature it is unlikely that subsequent revisions will materially modify the basic conclusions they imply.

The first observation that may be made about the table's data is the consistent growth in capital outlay anticipated for the City. Growth is also anticipated for the Boston SMSA and the state, but growth for these regions, especially the SMSA, is more in line with conventional expectations than is anticipated growth for the City.

Not only is capital outlay expected to show overall growth through 1980, growth is anticipated for all sectors of Boston's economy. From 1969 to 1980 overall investment is projected to increase from 873.1 millions of dollars (constant 1970 dollars) to an impressive 1,634.8 millions - almost a doubling. Growth will not proceed at the same rate for all sectors, however. Thus, the percentage rate of increase in capital outlay for major sectors in Boston is projected to be:

*Our economic consultant, Richard A. Siegel assisted the BRA in this work.

Table 1

Capital Outlay, By Industry, in the City of Boston, in the Metropolitan Area, and in the State
(millions of constant 1970 dollars)

							Projections				
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1975	1980
<u>CITY OF BOSTON</u>											
Total	<u>607.3</u>	<u>678.4</u>	<u>633.3</u>	<u>719.1</u>	<u>752.4</u>	<u>821.2</u>	<u>849.6</u>	<u>855.6</u>	<u>873.1</u>	<u>1262.5</u>	<u>1634.8</u>
Agriculture, Forestry, Fisheries, Mining and Contract Construction	8.3	9.4	8.4	8.9	8.6	7.1	8.0	6.1	5.8	7.6	8.7
Manufacturing	33.4	34.9	34.4	35.2	36.0	47.8	40.8	42.5	37.5	50.2	81.4
Transportation, Communication, Electric, Gas and Sanitary Services	188.1	222.4	152.3	170.9	187.8	222.2	237.3	234.3	263.6	346.3	457.4
Wholesale Trade and Retail Trade	57.7	63.0	65.5	67.7	70.0	66.6	73.5	79.8	77.1	102.5	110.6
Finance, Insurance and Real Estate Services	69.4	81.6	94.3	128.4	119.9	129.9	124.2	148.1	141.8	240.8	254.7
Government	130.4	139.1	142.4	164.0	178.1	187.5	181.3	167.0	156.8	244.7	365.7
	120.0	128.0	136.0	144.0	152.0	160.1	184.5	177.8	190.5	270.4	356.3
<u>METROPOLITAN AREA</u>											
Total	<u>1095.9</u>	<u>1238.9</u>	<u>1181.1</u>	<u>1331.9</u>	<u>1429.2</u>	<u>1621.0</u>	<u>1650.4</u>	<u>1726.2</u>	<u>1793.0</u>	<u>2458.1</u>	<u>3260.4</u>
Agriculture, Forestry, Fisheries, Mining and Contract Construction	36.9	37.2	38.5	40.7	48.5	48.2	39.7	39.8	38.2	38.7	42.4
Manufacturing	163.3	161.2	149.5	151.8	171.2	252.7	242.6	246.1	230.5	265.1	365.4
Transportation, Communication, Electric, Gas and Sanitary Services	293.9	349.5	255.9	291.2	326.7	382.9	296.0	401.4	469.5	657.4	865.3
Wholesale Trade and Retail Trade	121.8	136.9	145.3	155.8	163.9	164.4	187.3	212.4	214.4	287.9	342.0
Finance, Insurance and Real Estate Services	91.5	107.6	125.1	171.4	160.5	174.4	162.0	197.6	189.5	302.5	324.1
Government	228.4	274.4	281.8	322.1	344.5	368.4	377.8	368.9	370.9	524.8	732.6
	160.1	172.1	185.0	198.9	213.9	230.0	245.0	260.0	280.0	381.7	588.6

(cont'd.)

Table 1 (con'd.)

STATE							Projections				
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1975	1980
Total	1884.7	2174.2	2160.9	2487.8	2615.3	3035.7	3094.3	3191.3	3272.5	4381.4	5653.4
Agriculture, Forestry, Fisheries, Mining and Contract Construction	57.8	59.9	59.6	102.6	61.2	61.9	58.0	57.2	60.3	66.9	72.8
Manufacturing	313.8	335.8	338.0	379.4	412.2	574.4	548.2	551.7	515.0	570.4	742.6
Transportation, Communication, Electric, Gas and Sanitary Services	413.5	495.4	357.9	410.1	465.3	553.3	571.7	558.7	639.2	841.2	1105.2
Wholesale Trade and Retail Trade	195.8	220.6	240.4	252.6	266.9	277.5	292.7	326.6	327.3	420.8	484.7
Finance, Insurance and Real Estate Services	1113.9	131.8	154.3	214.9	203.1	219.4	204.0	242.2	231.4	357.4	431.8
Government	440.7	497.1	549.2	433.6	520.1	541.1	510.5	603.7	601.5	893.0	1190.5

BRA RESEARCH DEPARTMENT, Jan. 1973. These figures will be revised in line with more recent employment and gross product data than that available in 1973.

Percentage Change In
Capital Investment
1969-1980

<u>Sector</u>	
Total	.87
Agriculture, forestry, fisheries, mining and contract construction	.50
Manufacturing	1.17
Transportation, communica- tion and utilities	.74
Trade	.43
Finance, insurance, and real estate	.80
Services	1.33
Government	.87

Manufacturing and services top the list for rate of growth. Other sectors, such as trade and transportation, communications, and utilities will exhibit higher absolute magnitudes of growth because they loom larger as a proportion of the City's economy.

For this feasibility study the conclusion of primary interest is the fact that the projections indicate all sectors, including manufacturing, will probably grow. This provides an optimistic cast to expectations for success if the park is developed and a search is undertaken for tenants. Projections, of course, are projections and do not carry guarantees that their statements accurately portray the future. Nevertheless, the projections in table 1 were prepared by a capable team at the BRA and represent responsible estimates made by close observers of Boston's economy. It is also important to note that these projections of capital outlay represent the type of spending flows of primary interest to the CDC. The CDC is greatly interested in the propensity of business firms to spend money for plant and equipment in Boston. These figures suggest that firms will be doing this kind of spending in Boston over the time period that the park will be under development should a decision be made to go forward.

A note on methodology, the capital outlay projections in Table 1 were provided by an econometric model, not by an extrapolation of trend. It is thus understandable that the forecast for 1975 and 1980 indicate growth even though the later historical years in some industries shows a decline.

Employment Trends in Boston

The just discussed trends in capital outlay spending are interesting and important to the CDC in its role as an organization that must make decisions about spending its own dollars for front-end expenditures to develop East Boston. However, even more important to the CDC is to provide employment opportunities for its constituents. The question thus naturally arises to inquire about expected employment trends in the city. Capital outlay could be utilized to renew obsolete facilities and equipment or provide more capital back-up for already employed workers rather than to provide capacity to support additional employment.

Table 2 provides some information on the employment question. This table, also prepared by the Research Department of the BRA, offers data on the past performance of city and SMSA in these terms, and target figures for 1975 and 1980. Targets, as utilized in the table, are figures used to portray a desirable state of affairs, attainable under current information about the functioning of the city's economy. Targets are thus partly projections and partly subjective, but expert, estimates of the attainable. For this feasibility study it would be better to have straightforward projections or forecasts to analyze, but these are unavailable. Targets, however, are not mere guesses and are useful information for our study.

Employment growth in Boston from 1969 to 1980, as calculated from table 2 could quite likely proceed at these rates:

Sector	Percentage Change 1969-1980
Total	.27
Agriculture, mining and construction	.03
Manufacturing	.12
Transportation, communication and utilities	.15
Trade	.15
Finance, insurance and real estate	.37
Services	.52
Government	.25

Again, growth is expected for all sectors, including manufacturing. The target employment growth rates are lower than the projected rates for capital expenditures, implying that an increase in capital equipment per worker may be anticipated. This is an important finding for the CDC: the reasoning is as follows.

Table 2*

Employment, By Industry, In The City of Boston
And In The Metropolitan Area

(Thousands of Workers)

CITY OF BOSTON	1960	1963	1965	1967	1968	1969	1975	1980	Target 561.4
Total	479.7	467.0	471.6	491.1	490.8	502.6			637.3
Agriculture and	1.4	1.2	1.3	.9	.7	.7			.5
Mining	16.9	17.0	17.1	17.2	17.5	17.7	18.1	18.4	
Construction	87.4	79.8	75.9	73.0	69.3	67.0	68.3	74.8	
Manufacturing									
Trans. Comm. &	44.6	40.1	39.0	41.1	41.4	42.3	45.7	48.6	
Public Relations	45.4	42.4	42.0	44.0	41.5	41.3	40.7	41.8	
Wholesale Trade	76.7	73.7	74.3	75.6	77.0	77.9	86.2	95.6	
Retail Trade									
Finance, Insurance	53.5	56.7	56.8	62.8	65.9	69.2	80.0	95.1	
and Real Estate	83.0	84.8	91.9	101.1	105.7	108.7	135.0	165.4	
Services	70.9	71.2	73.3	75.5	76.6	77.7	86.9	97.2	
Government									
<u>METROPOLITAN AREA</u>									
Total	1026.1	1041.3	1084.2	1179.4	1199.7	1220.9	1392.4	1574.3	
Agriculture and	3.8	4.0	4.3	4.0	3.8	3.7	3.5	3.4	
Mining	46.8	48.4	48.8	49.8	51.9	50.1	57.7	60.7	
Construction	303.8	284.6	284.1	304.4	296.5	292.2	301.0	315.5	
Manufacturing									
Trans. Comm. &	69.7	67.5	68.0	71.6	69.1	73.8	83.4	88.6	
Public Relations	170.4	171.9	180.8	197.8	204.3	207.4	246.8	279.5	
Retail Trade	68.6	68.4	74.8	76.6	79.1	80.3	90.7	98.6	
Wholesale Trade									
Finance, Insurance	70.8	75.3	76.0	83.6	86.5	89.6	110.2	127.8	
and Real Estate	183.9	208.2	229.4	264.3	278.6	290.2	331.1	402.8	
Services	108.1	113.0	118.0	127.5	130.2	133.9	168.0	197.7	
Government									

*Source: Alexander Ganz and Peter Menconeri, The Expanding City of Boston Economy, (Boston Redevelopment Authority; Boston: 1970), p. 53.

Wage rates, and, it follows, annual worker income, are heavily influenced by labor productivity. Labor productivity, in turn, is heavily influenced by the amount and quality of equipment and facilities utilized for each worker in a firm. The purchaser justifies the additional expense by the profit that can be gained from the output increases derived from utilizing the machine. Historically, part of the additional profit from productivity increases has been shared by the work force, and there is no reason to expect this process to change.

While the ratio of change in capital outlay to change in employment from 1969 to 1980 is substantial it is not necessarily true that the entire Boston labor force will benefit equally from implied increase in capital per worker. For one thing, the city has a huge stock of existing plant and equipment and the additions to that stock, while impressive will not drastically change the overall ratio of capital to labor. Also, much new capital outlay will be used to replace depreciated and worn out capital. However, happily for East Boston, the labor force in the new industrial park, if it is constructed, will be in an excellent position to benefit from the new capital outlay. The capital outlay projections are for the city's economy as a whole and are embodied in fact by projects like the development of the park. The projections, that is, assume that projects like the park will be undertaken. Workers fortunate enough to be employed in modern new buildings with modern new equipment will be the first to benefit.

East Boston need not fear from the above discussion that workers will not be needed in quantity by industrial park employers. The CDC is in a position to encourage tenants who are in need of hiring people. But even more basically the history of this country demonstrates that productivity improvements through capital investment does not harm employment. Industry has grown both in the amount of capital and the amount of labor used. Capital does not substitute for labor, it makes labor more productive.

What Industries?

The above data and discussions lead to the conclusion that Boston has a basically strong economy and the CDC is thus operating in what may be expected to be a favorable, though not necessarily booming, economic environment. The CDC requires more specific information, however, on the type of industries that are likely to be good candidates for tenancy in the park.

First, let's list the development potentials for the park as suggested by several recent studies and events. The conflict between the development potentials implied by some of these studies and events will be apparent. Two schools of thought dominate the view of the industrial future of Boston. One favors manufacturing, the other emphasizes the growing role of the service industries.

2. Manufacturing Industries

The people and institutions that favor enhancement of the manufacturing sector of the city's economy point to the strength of electronics and other high technology industry in the Boston SMSA, on the one hand; and to the employment requirements of the unskilled or semi-skilled worker in the Boston labor force, on the other. Thus, the pro-manufacturing arguments seem to say, first, let's build on our strengths; and second, let's try to provide jobs for those who need them. These arguments are less contradictory than they appear because they are generally put forth by different institutions. Thus, the building-from-strength theme is emphasized by the Massachusetts Department of Commerce and Development, The First National Bank of Boston, Jobs for Massachusetts, Inc., and others who are primarily interested in expanding the state, regional and city economies. The good-for-the-worker theme is emphasized by Boston's Economic Development and Industrial Corporation; for example, out of a concern for expanding the opportunities for blue collar workers.

Industries identified as good development candidates by those who wish to stimulate manufacturing are, for example:

- Biomedical instrumentation, computer peripheral equipment, and pollution control equipment. These were specified in a 1971 report to the Massachusetts Department of Commerce by Arthur D. Little, Inc.
- As set forth in the Robertson report to EBCDC, the industries with the most potential include;
 - Biological products
 - Medicinal chemicals

- Botanical products
- Pharmaceutical preparations
- Commercial printing except lithography
- Commercial printing, lithographic
- Typesetting
- Plumbing fittings and brass goods
- Heating equipment except electric
- Manifold business forms
- Sausage and other prepared meat products
- Metal sanitary wares

- As identified by the Economic Development and Industrial Corporation on the basis of good promise in the city;
 - Wood partitions, shelving, etc.
 - Blowers and ventilating fans
 - Meat packing plants
 - Sausages and other prepared meat products
 - Books, printing and publishing
 - Typesetting
 - Photoengraving
 - Male suits, coats, and overcoats
 - Female suits, skirts, and coats
 - Female outerware, n.e.c.
 - Flavoring extracts and flavoring syrups, n.e.c.
 - Commercial printing, letterpress and screen
 - Bread, and other bakery products, except cookies and crackers
 - Newspapers, publishing and printing
 - Sheet metal work
 - Signs and advertising displays
 - Paper bags
 - Food products machinery
 - Ophthalmic goods

Of these industries, most are represented in the Boston area and there is no reason for the CDC not to contact local firms to discuss the possibilities for a move, for the use of the industrial park for expansion, or for leads to other firms that may be interested in space. We will return to the potential for this type of effort just below.

3. Service Industries

The facts of industry development in Boston, the state, and the nation as a whole indicate that manufacturing has a less promising growth future than the service producing industries. A few quotations from a recent paper prepared by staff people at the Boston Redevelopment Authority show the situation for the city.*

"The role of manufacturing, which was the leading sector of the city's economy in the 1950's, accounting for 20 percent of all jobs, declined to approximately 10 percent ...in 1972."(p.4.)

"By 1985, services employment is expected to account for over 45 percent of all U.S. Employment. For the City of Boston, projections indicate an amplification of the services oriented growth pattern, with nearly 80 percent of the 90,000 new jobs which Boston may capture over the next 10 years concentrated in service activities." (pp. 5 and 6)

The overall trends, then, appear to suggest that EBCDC focus a substantial proportion of its business attraction effort on service-type industries. The decision on the type of industries to pursue, however, must take special factors into account as well as overall economic trends.

Special Factors

Four special factors that must be heavily weighed in deciding on industries to attract are:

- 1) The high interest in the industrial park site expressed by Boston's Economic Development and Industrial Corporation. EDIC recently received \$7,000,000 in bonding authority and is moving forward rapidly to develop industrial sites in the city. An industrial park is being developed on the Alsen-Mapes site in Dorchester with High Voltage Engineering as prime tenant. EDIC has been told by a consultant it retained to evaluate

*

Peter Menconeri, et.al.; Jobs, Manpower, and Education, a paper prepared for the Parkman Conference Center Program, January, 1974.

other sites that the East Boston industrial park site should receive close scrutiny as a possible location for its second park and has already contacted the CDC to discuss this interest. EDIC has a strong preference for manufacturing industries although it probably would cooperate in a feasible service oriented park.

- 2) A major ship-building venture may soon proceed for South Boston and Charlestown. If this occurs, the East Boston site may be useful for the location of firms that serve the shipyard.
- 3) In addition, the CDC may wish the park to provide a new home for East Boston firms that wish to, or must relocate (especially those now located in areas desired by the community for other uses).
- 4) The opportunity provided by the airport is both explicit and implicit in much of this discussion. Opportunities exist for firms that depend upon the airport for personnel and freight transportation, and that service airport-based organizations such as the air lines. Many industries that are obviously influenced by an airport are listed in the Standard Industrial Classification Manual and these are listed below. Further investigation of manufacturing industries would be useful to identify those with a high value, low weight and bulk product and that also employ some people that travel a great deal. These industries would also be of the type that would employ many semi-skilled workers.

While the growth of Boston seems to be centered on the service industries, not all service industries are suited to meet the CDC's goals. The above cited BRA paper points out that new professional, administrative, and clerical jobs will not meet the employment needs of blue collar workers. The CDC must find service industry firms that match its labor force requirements.

What is the implication of all of this? It is, we believe, the advisability of a strategy that not only looks carefully for service industry opportunities (because that is where the growth trends are strongest) but one that also explores the possibilities created by the special features of time and place. Thus:

- Local firms should be interviewed to assess interest in space in a new industrial park.*

* The prime tenants of the Alsen-Mapes park are Dorchester firms that need modern, new facilities.

- Key firms in manufacturing, especially those known to have a "social conscience" such as the Polaroid Corporation, should be visited and asked if they are interested in space, or if they can furnish leads about firms that may be so interested.
- Close contact should be established and maintained with EDIC to coordinate programs, and to obtain leads on interested firms, or to interest firms.
- The service industries should be carefully examined for candidate industries. In the service industries several classifications appear suitable for the industrial park.
For example:
 - Wholesale trade (SIC 50) several sub-industries that require combined office and storage space would appear suitable.
 - Parcel delivery, by truck, (SIC 4212) to distribute airborne packages.*
 - Laundry, cleaning, and garment services (SIC 721).
 - Freight consolidation and freight forwarding (SIC 4712) for air freight goods.*
 - Equipment rental and leasing services (SIC 7394).

*

In a telephone interview it was learned that Massport itself is developing a section of the airport property to serve as a site for freight forwarding firms.

- Photofinishing laboratories (SIC 7395).
- Miscellaneous repair services (SIC 76).
- Medical laboratories (SIC 8071).

Business Development Tools

Publicly provided business development tools may be used to attract desired firms to the industrial park, or to support individuals who wish to begin a new business.

The CDC will have many established government and private programs and organizations to work with in the conduct of its industrial park development program. Indeed, one very important aspect of its work will be to arrange for the "packaging" of these programs and organizations to focus resources for its purposes. The CDC economic development program officer must work to focus several program instruments on each enterprise created to give it maximum assistance.

Program instruments may be classified in several ways. For our purpose it is useful to separate them into the categories of monetary and real resources, technical assistance resources, and organization.

Monetary and Real Resources

We will not attempt a full listing of grant and loan sources available from the Federal government and from state agencies in New England. Our main purpose is to emphasize the key

role played by existing grant and loan funds that may be tapped to assist enterprises. Grant and loan funds for development of the park site itself, such as for water mains, sewers, roads, and site preparation are not considered in this place.

- The U.S. Department of Commerce, through such agencies as the Economic Development Administration, the Small Business Administration, and the Office of Minority Business Enterprise assists individual businessmen by making available short and long term loans. These programs work in several ways:
 - Individual businessmen or entrepreneurs may approach the agencies directly for assistance.
 - The agencies support individual enterprises indirectly through supporting small business investment companies, including MESBICS. EBCDC is presently attempting to form a MESBIC.
- The City of Boston has been designated an OEDP area by the Department of Commerce.
- The U.S. Department of Labor. Though manpower programs are not the same as programs that provide financial aide they are only a short step removed. Programs such as NAB-JOBS, MDTA-OJT, NYC in-school and out-of-school, WIN, CEP and others may provide direct training for employees of new enterprises and wage subsidies. New enterprises may find it possible to offset a substantial portion of their wage bill by such subsidies.
- Private equity and loan capital sources for businesses. Commercial banks, SBIC's and individual investors must play an important financing role in any large-scale development program. Private capital may be tapped in many ways:
 - Many government programs operate to guarantee loans from private financial

institutions, or may only arrange loans as part of a package that includes private monies. The applicant to a government agency, therefore, will most likely find it necessary to turn to the private sector as well for funds.

- Some banks and insurance companies have special programs to assist poor people who wish to start business enterprises.

Technical Assistance

Technical assistance is universally cited as a necessity for successful operation of business owned and operated by people with limited resources. Technical assistance is available from a staggering array of government and private organizations and ranges from a supply of consulting resources financed out of program funds to voluntary assistance by government program people and private businessmen. Technical assistance resources are:

- o Listed in documents such as the Directory of Private Programs Assisting Minority Business.
- o Often made available by Chambers of Commerce and other business organizations.
- o Supplied by organizations such as the newly organized VITA, retired executive clubs, and many other institutions and organizations, including private consultants.
- o College and universities.
- o Supplied by government agencies such as the Urban Finance Section of the Federal Reserve Bank of Boston.

The CDC has submitted a proposal to establish a Local Business Development Organization (LBDO) which will assist business in East Boston, Chelsea, Revere and Winthrop.

Market Absorption Capacity. The proposed industrial park is not a typical public or private land assembly and development project. If the CDC becomes actively involved in the development of the industrial park it will probably

be as the developer or as the managing partner in a development team. The CDC has unique advantages in this regard because it is very representative of the community (over 5,700 local stockholders) yet has access to local, state, Federal and private funding sources that an ordinary private developer would not have. As developers of the industrial park, the concern will not be that of selling land but rather to initiate and continue a program of development and employment. Most industrial firms seek sites where the opportunity for expansion exists and they will usually seek sites larger than their immediate needs. Therefore, to measure progress primarily by the sale of land is sometimes misleading. The CDC can probably design the industrial park in a way that will assure firms of expansion capability without tying up large sums of money in excess land.

The following are our basic assumptions for the subject site development at the time land is offered for development to a specific industrial firm:

1. That the land is physically ready for industrial development.
 - a. That all necessary demolition has been accomplished.
 - b. That the land is graded with good clean fill, gradually sloped averaging less than 3 percent of existing grades or abutting street grades.
2. That good soil tests will have been made and reports and recommendations will be available to prospective user/purchasers so that they may have an accurate sense of building costs, since we know that poor subsoil conditions exist on portions of the site.
3. That good highway access is available and proper curb cuts will be permitted to maximize the development of the entire site.
4. That access to an interior street will be available before disposition and delivery of the industrial site, and will be adequate in size

and capacity to accommodate tractor trailer trucks and other heavy equipment which may be necessary to serve the park.

5. That all utilities will be in (up to lot lines).
 - a. That water pressure will be adequate for normal industrial use and for building sprinklering (process water needs must be evaluated on an individual basis to determine adequacy).
 - b. That electric service will be adequate for heavy machinery.
 - c. That sewers will be adequate for normal industrial waste (special wastes will require specific evaluation).
6. That all EPA permits and approvals will be in hand for an industrial park in which manufacturing, processing, and/or warehousing will be carried on, approvals relating especially to air, water and noise pollution, parking and traffic.

We estimate that of the total area of over 50 acres which may be available at the subject site, a substantial portion is wet land or water and there would be approximately 32 acres developable for an industrial park. As discussed elsewhere, we anticipate total floor area at approximately 500,000 to 600,000 square feet. If one further assumes a rule-of-thumb of 500 square feet per person of building floor area for manufacturing jobs, this would equate to about 1,000 jobs.* Some industrial developers are finding that approximately 20 jobs result from each gross acre of industrially developed land. On this basis the subject site of 32 acres would provide some 640 jobs.

*A recent study by the Urban Land Institute in the Baltimore area indicated wide-ranging floor space needs for different industry groups with the average being 670 sq.ft. per employee in the central city and 568 in the suburbs. The same study showed that manufacturing required more space per employee than non-manufacturing. Industrial Potential of the Central City, ULI, 1973. In addition, a 1970 EDIC study, Boston's Industries, gives an average figure of 500 sq. ft. per employee.

We might further suggest that the park, being as small as these dimensions indicate, might well be planned with minimum sites sized in 2 to 5 acre increments but that potential site size remain flexible.

It may well be that with new land set aside with industrial park amenities, which are fair and workable, but have stringent minimum design and development standards to maintain long term value in the park, some of the larger firms in East Boston such as those in the old G.E. Building, might be candidates for new space in the industrial park. The size and condition of many of the industrial facilities in East Boston suggests to us that some of the smaller and/or more marginal operations may not have the financial ability to move from their present locations into new space unless they find themselves urban renewal relocatees who would be eligible to receive some moving expense help and some assistance in securing S.B.A. loans. Then we would expect to see some "filtering up" process take place with less able manufacturers moving into G.E. type space, with the low man on the ladder finally moving out of his substandard plant.

A report was made in 1972 on East Boston, the North End, and Charlestown by EDIC. Briefly, it consisted of an inventory of industrial land in each of these sub-communities and general data on several sites recommended for study for new or renewed industrial development. The study indicated that in East Boston approximately 6,149,540 square feet of land or roughly 141 acres are under industrial use. The breakdown was approximately 21.2 acres - light industrial, 9 acres - heavy industrial, 49.3 acres - wholesale, and a total of 87 establishments. This report did not make an industrial floor area inventory, therefore, it has been necessary to come up with rough estimates of our own. By using this survey as a guide to the industrial buildings in East Boston and by carefully checking the basic findings and adding to them the specific data provided to the East Boston Community Development Corporation by the Robertson Report together with the B.R.A. and Sanborn maps, it was possible to estimate the industrial floor space to be about 900,000 square feet. Allowing for 10 percent which might be untabulated, we round this figure to 1,000,000 square feet of industrial space in East Boston, presently in use.

The following Project Demand Worksheet 1 is based on the estimated industrial floor area inventory of 1,000,000 square feet. Project Demand Worksheet 2 uses as base data the minimum and maximum manufacturing jobs estimated to exist in East Boston (from the Robertson Report). Since no specific inventory is available the estimate of wholesale and miscellaneous industrial jobs used in this Worksheet is based on the "reasonable" percentage of the manufacturing jobs which may exist in the community.

Our estimates and projections take a conservative approach. Particularly attractive real estate tax arrangements with the city, development financing, special training programs and the like, for this specific project, and/or the development of one or more large industries in the Boston area which would generate satellite industries which might wish to locate in East Boston, could, of course, accelerate the suggested absorption rates.

The project demand worksheets indicate that 10 to 15 years may be required to absorb all land and buildings in the proposed industrial park. This assumes total development (including expansion) of all parcels. Based upon comparable progress in urban renewal projects and industrial park projects throughout the nation, this is considered a good rate of absorption.

Within a framework of land use planning which will be in harmony with the activities of the community of East Boston, will maximize benefits to the community and provide new and, hopefully better job opportunities to the residents, the industrial park should be judged a success if it attains this rate. Further comments on financial feasibility are contained elsewhere.

Basically the background data gathered for this report indicates that industrial construction in Boston has been quite limited in recent years; very little has taken place in East Boston. Potential for future growth, however, appears to be good, based upon local and regional trends and the CDC's unique position.

No detailed comparison of the subject site for industrial use with any other sites in East Boston has been made; nor has detailed comparison of it to any industrial sites

Table 3
PROJECT DEMAND WORKSHEET 1

Assume an East Boston industrial floor area existing inventory of 1,000,000 square feet.

Replacement @ 2% per year	20,000 sq.ft.
Pent-up Demand	0
Growth - 1% per year	<u>10,000</u>

Total Estimated Annual Pressure for new construction - East Boston	30,000
--	--------

Estimated additional annual city-wide pressure	150,000
--	---------

	<u>60% of East Boston Pressure</u>	<u>10% of City-Wide Pressure</u>	<u>Total</u>
Project Share - (per year)	18,000	15,000	33,000
5 years	90,000	75,000	165,000
10 years	180,000	150,000	330,000
15 years	270,000	225,000	495,000

Note: This worksheet assumes no acceleration of replacement, no build-up for pent-up demand, no accelerated pressure from growth via true growth or relocation. If any or more of these factors accelerate, so will absorption.

Table 4
PROJECT DEMAND WORKSHEET 2

<u>Jobs:</u> *	<u>Maximum</u>		
Manufacturing:	@500 sq.ft. per job		
Wholesale:	@600 sq.ft. per job		
Miscellaneous:**	@300 sq.ft. per job		
Total "Working" Floor Area Inventory	<u>2,294,000</u>		
Market Pressures - Annual			
Replacement - 1 1/2% per year	34,400		
Pent-up Demand	0		
Growth - 1% per year	22,900		
Total Annual Pressure - East Boston	<u>57,300</u>		
Estimated additional annual city-wide pressure	150,000		
	<u>70% of East Boston Pressure</u>	<u>10% of City-Wide Pressure</u>	<u>Total</u>
Project Share - (per year)	40,000	15,000	55,000
5 years	200,000	75,000	275,000
10 years	400,000	150,000	550,000
15 years	600,000	225,000	825,000

Note: Any change in project's share of East Boston or city-wide pressure will be reflected in the absorption rates.

* Jobs estimated by SIC categories - based on an estimate of manufacturing jobs of -

minimum 1500)
 optimum 2600) see page 30 Robertson Report
 maximum 3700) see page 16 EBPP - John Brown Associates

** Service, office, distribution, etc.

available in neighboring communities been made. We believe, however, that very few sites of comparable size and locational characteristics exist within the regional core.

We have tried to give sufficient background data on purchases of industrial land in the Boston area so that the reader may be able to get the feel of what industrial users are willing to pay for land to develop with new construction. (See April 18, 1974 memorandum).

A potential obstacle to development is the real estate tax burden which restricts commercial and industrial development in the City of Boston. The climate for such development is not competitive with that in most other communities in Massachusetts. If this problem can be met and the costs of site improvements can be kept low enough so that the land to be sold or leased to industrial users can be competitively priced with other industrial property it is our opinion that the subject site can be developed successfully within a reasonable period of time.

In the tables following this page we present figures summarizing the costs related to the development of the industrial park and preliminary conclusions of financial feasibility based upon facts known or assumed at this time. As further information is obtained and as discussions continue, these figures should be revised and detailed and a cash flow analysis should be prepared.

We have also included EDIC's preliminary financial analysis for comparison purposes. While we do not agree with many of the assumptions of EDIC's analysis (especially \$14 per square foot construction cost), the EDIC financing formula is set forth here. EDIC's calculations demonstrate use of financing available through them. Their low square foot building cost probably envisions prefabricated metal industrial buildings.

Table 5

PRELIMINARY FINANCIAL ANALYSIS
EAST BOSTON INDUSTRIAL PARK

Analysis 1 which follows makes the following assumptions which differ from Analyses 2 and 3:

- Land acquisition at \$1,500,000
(Analysis 2 at \$2,000,000, Analysis 3 at \$2,500,000)
- No substantial filling of site
(Analyses 2 and 3 include)
- Spread footings for 75% - 85% of buildings (no piles);
normal foundations for remaining buildings.
(Analyses 2 and 3 include piles)
- Our estimate of \$250,000 for water and sewer rather
than EDIC's \$350,000
(Analysis 2 uses \$250,000; Analysis 3 uses \$350,000)
- Building construction at \$16
(Analysis 2 at \$18, Analysis 3 at \$19)
- Financing at a 7.0 percent interest rate
(Analysis 2 at 8 percent, Analysis 3 at 9 percent)
- Taxes at 16 percent of gross revenue
(Analysis 2 at 18 percent, Analysis 3 at 20 percent)*
- Profit at 5 percent
(Analysis 2 at 10 percent, Analysis 3 at 15 percent)

In notes to Analyses 1 and 3 we show additional sub-analyses resulting from changes to specific variables.

The following assumptions are common to all three tables which follow:

- Construction of a 40 foot wide central roadway of approximately 3,700 foot length including water, sewer, curbs, and drainage.
- A 10% contingency as part of capital costs.
- Management, insurance, exterior maintenance, and marketing fees at 7.5% of gross revenue.

*EDIC's estimates for taxes run to higher percents which we feel are too high for a project of this type.

(cont'd.)

Table 5 (cont'd.)

PRELIMINARY FINANCIAL ANALYSIS
EAST BOSTON INDUSTRIAL PARK

Analysis 1I. Capital Costs

a. Land acquisition	\$ 1,500,000
b. Demolition, tank work	250,000
c. Earthwork (no additional fill)	150,000
d. Special foundations (85% spread footings included in building costs)	-0-
e. Water and sewer	250,000
f. Roads, drainage, landscaping	422,000
g. Building construction (500,000 sq.ft. @ \$16)	
	subtotal
h. 10% contingency (including interest during construction, engineering, etc.)	
	TOTAL

II. Expenses (Yearly)

a. Principal and interest (25 years @ 7.0%)	\$ 986,000
b. Taxes (16% of gross revenue)	200,000
c. Management, insurance, exterior maintenance, marketing (7.5% of gross revenue)	94,000
d. Profit (5% of gross revenue)	62,000
	\$ 1,342,000

III. Required Rental Rate

Costs (\$1,342,000) \div 500,000 sq.ft. = \$2.68 per square foot.

Notes:

1. An increase in building costs only to \$18 would increase sq.ft. cost to \$2.87.
2. An increase in interest rate only to 8% would increase sq.ft. cost to \$2.86.
3. An increase in taxes only to 18% would increase sq.ft. cost to \$2.73.
4. An increase in profit level only to 10% would increase sq.ft. cost to \$2.81.

(cont'd.)

Table 5 (cont'd.)

PRELIMINARY FINANCIAL ANALYSIS
EAST BOSTON INDUSTRIAL PARK

Analysis 2

I. Capital Costs

a. Land acquisition	\$ 2,000,000
b. Demolition, tank work	325,000
c. Earthwork and fill	290,000
d. Special foundations (85% spread footings included in building costs)	-0-
e. Water and sewer	250,000
f. Roads, drainage, landscaping	422,000
g. Building construction (500,000 sq.ft. @ \$18)	9,000,000
	subtotal
h. 10% contingency (including interest during construction, engineering, etc.)	12,287,000
	TOTAL
	<u>1,229,000</u>
	<u>\$13,516,000</u>

II. Expenses (Yearly)

a. Principal and interest (25 years @ 8.0%)	\$ 1,252,000
b. Taxes (18% of gross revenue)	338,000
c. Management, insurance, exterior main- tenance, marketing (7.5% of gross revenue)	141,000
d. Profit (10% of gross revenue)	188,000
	TOTAL
	<u>\$ 1,919,000</u>

III. Required Rental Rate

Costs (\$1,919,000) ÷ 500,000 sq.ft. = \$3.83 per square foot.

(cont'd.)

Table 5 (cont'd.)

PRELIMINARY FINANCIAL ANALYSIS
EAST BOSTON INDUSTRIAL PARK

Analysis 3

I. Capital Costs

a. Land acquisition	\$ 2,500,000
b. Demolition, tank work	325,000
c. Earthwork and fill	290,000
d. Special foundations (@ \$2,80/ sq.ft.)	
over normal foundation costs)	1,400,000
e. Water and sewer (EDIC estimate)	350,000
f. Roads, drainage, landscaping	422,000
g. Building construction	
(500,000 sq.ft. @ \$19)	9,500,000
	subtotal
	\$14,786,000
h. 10% contingency (including interest during construction, engineering, etc.)	1,479,000
	TOTAL
	\$16,265,000

II. Expenses (Yearly)

a. Principal and interest (25 years @ 9%)	\$ 1,638,000
b. Taxes (20% of gross revenue)	500,000
c. Management, insurance, exterior main- tenance, marketing (7.5% of gross revenue)	187,000
d. Profit (15% of gross revenue)	375,000
	<u>\$ 2,700,000</u>

III. Required Rental Rate

Cost (\$2,488,000) ÷ 500,000 sq.ft. = \$5.40 per square foot.

Notes:

1. A decrease in building costs only to \$17 would decrease sq.ft. cost to \$5.17.
2. A decrease in interest only to 8% would decrease sq.ft. cost to \$5.13.
3. A decrease in taxes only to 18% would decrease sq.ft. cost to \$5.30
4. A decrease in profit only to 10% would decrease sq.ft. cost to \$5.15.

Table 6

PROJECTED CAPITAL COSTSEast Boston Industrial SitePro Forma

Source: Boston Economic Development and Industrial Corporation

Critical Assumptions

- 1) 1,951,000 sq.ft. of private land acquired at \$1.50/sq.ft.
- 2) 1,000,000 sq.ft. of new building space constructed at \$14/sq.ft.
- 3) Cost of tank removal is \$20,000 per tank.
- 4) Cost of upgrading site utilities is \$350,000.

Detailed Assumptions

Buildings: Several new one-story industrial type with total floor space of 1,000,000 sq.ft. The floor area ratio is 0.51 (51% site coverage) and the buildings have heat, light, electricity and plumbing.

Land: The entire industrial site is 1,951,000 sq.ft. of land (44.8 acres). Private land, on the average, is acquired at \$1.50/sq.ft. or a total acquisition price of \$2,926,500.

Construction takes 18 months (1.50 years) from the time of Council approval. Insurance and real estate taxes during construction are two year expenses while bond interest charges during construction are 1.50 year expenses.

Development Financing:

Land acquisition, preparation, demolition, relocation and miscellaneous costs are at 5.8% interest for 20 years at an agreed upon fixed 'constant' of 8.05% through the use of General Obligation bonds.

Building construction, and indirect project costs are at 7.0% interest for 20 years at an agreed upon fixed 'constant' of 8.6% through the use of Industrial Revenue bonds.

(cont'd.)

Table 6 (cont'd.)

1,000,000 sq.ft. building spacePro FormaCosts Covered By General Obligation Bond

	\$3,572,500
Land Acquisition: 1,951,000 @ \$1.50/sq.ft.	\$2,926,500
Demolition: 2 structures @ 8,000 per	16,000
Relocation: 2 firms @ 10,000 per	20,000
Site Preparation: 13 tanks @ 20,000 per	260,000
Utilities: Water and sewer lines where needed	<u>350,000</u>
Total Land Costs	\$3,572,500
Indirect Costs:	
Advertising @ \$0.105/sq.ft. (1,000,000 sq.ft.)	105,000
Miscellaneous Costs (bond pointing legal fees, etc.)	<u>10,000</u>
Interest charges during construction	
(<u>\$3,924,440</u>) (8.05% constant) (1.5 years)	<u>236,940</u>
Total Indirect Costs	<u>2</u>
TOTAL CAPITAL COSTS COVERED BY G.O. BONDS	<u>\$3,924,440</u>
	<u>\$ 351,940</u>

(cont'd.)

Table 6 (cont'd.)

1,000,000 sq. ft. building spacePro FormaCosts Covered By Industrial Revenue Bonds

Buildings: 1,000,000 sq. ft. of new space @ \$14.00/sq. ft.
 -0- sq. ft. of rehabilitated space

Total Building CostsIndirect Costs:

Real Estate taxes during construction
 (\$970,000 assessed value of land) x (\$200/\$1,000 AV)
 x (2 years)

Insurance @ \$0.07/sq. ft. building area (2 years)
 Brokerage Commission @ \$0.50/sq. ft.
 Miscellaneous Costs

Interest charges during construction
 (16,010,270) (8.68% constant) (1.5 years)

Total Indirect CostsTOTAL CAPITAL COSTS COVERED BY IDFA BONDS

<u>14,000,000</u>	<u>-0-</u>	<u>—</u>
		<u>\$14,000,000</u>

<u>388,000</u>	<u>70,000</u>	<u>500,000</u>
		<u>10,000</u>

<u>1,042,270</u>	<u>2</u>	<u>—</u>
		<u>1,042,270</u>

<u>2,010,270</u>	<u>2</u>	<u>—</u>
		<u>2,010,270</u>

<u>16,010,270</u>	<u>2</u>	<u>—</u>
		<u>\$16,010,270</u>

(cont'd.)

Table 6 (cont'd.)

1,000,000 sq.ft. building space

Pro Forma

Total General Obligation Bond	\$ 3,924,440	
Total Industrial Revenue Bond	<u>\$16,010,270</u>	TOTAL PROJECT COST
Financing Costs: for G.O. - \$3,924,440 @ 8.05% constant (from 5.8% bond, 20 year term)	\$ 315,917	
for IDFA - \$16,010,270 @ 8.68% constant (from 7.0% bond, 20 year term)	<u>1,389,691</u>	
Total Financing Costs		\$1,705,608
Net, Net Rental: <u>\$1,705,608</u> 1,000,000 sq.ft.	= \$1.71/sq. ft.	
Add: Management .04 Insurance .07 Exterior Maintenance .05 5% vacancy and Rent Loss .07 Total <u>.23</u>		
Net Rental (exclusive of R.E. taxes) - \$1.94		
Real Estate Tax @ \$0.40/sq.ft. (17% of gross) = \$2.34/sq.ft. " " " @ \$0.50/sq.ft. (20% of gross) = \$2.44/sq.ft. " " " @ \$0.60/sq.ft. (24% of gross) = \$2.54/sq.ft. " " " @ \$0.70/sq.ft. (27% of gross) = \$2.64/sq.ft.		gross rent gross rent gross rent gross rent

III. ENVIRONMENTAL DESIGN CONCERNS

We believe that the industrial park must be an asset to the community or it should not be developed by the CDC.

Relation to Community

The proposed site was one of the key sites discussed in the CDC's report General Development Plan - Proposals For Key Sites and was recommended for industrial use. This report considered all land in East Boston and made this recommendation only after allocating land for balanced community development after extensive community discussion. There was virtually unanimous agreement on the subject site for industrial use. Inherent in this agreement was the understanding that the use would be light industrial and would have no adverse environmental impact on East Boston.

The accompanying maps show the relationship of the site to the community. The site is in the north corner of the community and is separated from surrounding areas by a highway, the Chelsea River, other industrial uses and topography. It is hard to envision a site in East Boston more isolated from residential neighborhoods.

Environmental Protection

It is recommended that specific performance standards be developed by the CDC relating to desired levels of air quality, noise quality, water quality and other environmental matters and that all prospective industrial use be measured by such standards. In a general sense such standards must be assumed to create no adverse environmental impacts on nearby residential or other areas. The types of uses contemplated in the industrial park, as discussed in another section of this report, are not expected to create any problems of this nature.

Site and Building Design

It is also recommended that the CDC prepare detailed building and site design objectives and controls as part of its detailed planning and engineering of the industrial park. These objectives and controls will deal with such matters as building size and location; parking, and loading;

CHELSEA

REVERE

B & M
RAILROAD

BUS LINE 123

ORIENT HEIGHTS

AUTO CITY

LIVE

LIve

MICCLELLAN
HIGHWAY

project
boundary

BAKER'S
DOZEN

RAMADA
INN

BUS LINES
116, 117

MBTA BLUE LINE
ORIENT HEIGHTS STATION

BUS LINE 120

AIRPORT

NEIGHBORHOOD CONTEXT

East Boston Industrial Park

EAST BOSTON COMMUNITY
DEVELOPMENT CORPORATION



MAY 1974

and aesthetic aspects such as building materials and landscaping.

Building Size and Location. Illustrative site sketches were prepared previously for the CDC and more recently for EDIC. Neither of these efforts can be considered to be more than very general diagrams because they were not based upon a definitive program for use. A start toward such a program is contained in this report along with additional information valuable to the site and building design process. No irrevocable site plans or building plans should be prepared until potential industries have agreed to locate in the industrial park but a master plan for access, utilities, grading, use and design concept should be prepared immediately along with engineering designs related to actually constructing such facilities. We would not recommend beginning construction of on-site facilities until definitive user interest is ascertained but off-site support facilities (traffic, water, sewer, etc.) could be made ready now for future connection to facilities within the park.

Estimates of hard land on the site vary from 30 to 40 acres; our best calculations are that approximately 32 acres is a realistic estimate. Further on-site engineering analysis is required before a firm figure can be advanced. We have made some assumptions concerning the nature of site development in the previous section of this report. We believe the following building size and location standards are reasonably appropriate for the subject site (subject to further design studies):

1. Building Heights

Soils will probably not support buildings taller than one-story without piles (see earlier discussion on soil conditions). In addition, most manufacturing operations prefer one story design because of assembly lines and other manufacturing processes. We would expect that most or all development will be of one story. If taller buildings are proposed we recommend that specific studies related to such proposals be carried out at that time. We have no objections to taller buildings subject to proper orientation, design and relation to surrounding areas.

2. Site Coverage By Buildings

Parking requirements and a desire to create a park-like atmosphere indicate that building coverage will probably be limited to 35% - 45% (see below).

Parking and Loading. Standards for parking and loading vary widely depending upon the particular user. It is usually best to relate parking to projected employees rather than floor space but floor space is important because it frequently relates closely to the number of employees. If, for example, the industrial park contained 500,000 square feet of floor space, and each employee occupied 400 to 600 square feet of floor space, then approximately 1,000 employees would be employed on the maximum working shift. It would be prudent to plan on only one out of each two employees using public transportation or carpools indicating that 500 parking spaces would be required (a standard of one space per two employees). Such spaces would require 200,000 square feet of land at 400 square feet per car (including aisles).

Loading spaces or bays to serve the above level of use would require about 30,000 square feet of land (30 bays at 1,000 square feet each).

Areas in Various Functions. To determine the potential for development and employment we have applied the foregoing standards and anticipate a distribution of functional areas within the industrial park as follows (could vary up to 25%):

	Function	Area (Square Feet)
Industrial floor space (one story buildings)		500,000
Parking		200,000
Loading		30,000
Access roads		130,000
Landscaping, setbacks, recreation, open storage		240,000
		<u>1,100,000</u> (25.3 A.)

If the site actually has 32 acres of hard land an additional 60-100,000 square feet of building space could probably be accommodated without difficulty. A building coverage of 40 percent on 32 acres of land would permit approximately 560,000 square feet of building.

Functional and Aesthetic Design. We feel that the following key points should be kept in mind by building and site designers involved in this site and its development and by those who review proposed building plans.

1. The site is at the entrance to the city and district from Revere and should present a pleasing appearance to those traveling into the city by road or rail.
2. If soil conditions require, buildings could be clustered more intensely in one area leaving the rest of the area for setting, low intensity use and possible riverfront park use.
3. If buildings are low, care must be taken to design roofscapes that are pleasing from the highway or Orient Heights (mechanical equipment, etc.).
4. Signs should be unified in design, in scale with buildings, and in keeping with a park-like setting. Overall control by the developer is essential.
5. Landscaping should be professionally designed, abundant, and well maintained.
6. Retain the potential for future water access to the site.
7. Provide for a possible future vehicular connection from the site to Chelsea Street, if possible.
8. Investigate the possibility of making a design feature (or features) from one or more of the existing raised tank areas where not used for other site facilities.
9. Use high quality building materials throughout the area maintaining colors and textures which are complementary to one another.
10. Allow a setback of 60 to 100 feet from McLellan Highway to allow for possible future widening.
11. A specific design review process should be established and carefully administered throughout the development of the industrial park to assure high quality design of buildings and sites.

IV. COMMUNITY DEVELOPMENT CORPORATION ROLE

Alternative Roles

A variety of potential roles exist for the East Boston Community Development Corporation in the development of the proposed industrial park. These are listed below:

1. CDC/EDIC Cooperative Effort
2. CDC/Grossman Partnership
3. CDC/EDIC/Grossman Partnership
4. CDC as Sole Developer
5. CDC as Limited Participant

A scenario for number 1 above would see EDIC 1) purchasing the land, 2) installing improvements (possibly with EDA assistance), 3) selling the land to the CDC subject to performance criteria, 4) CDC marketing the land according to plan and 5) CDC establishing personnel and training center in close cooperation with EDIC.

A scenario for number 2 would see the CDC and Grossman entering into a partnership, with the CDC serving as managing partner. Grossman could retain ownership of their land and lease it to the partnership. The other parcels would have to be purchased. The assistance of EDIC and EDA would also be sought for matters related to financing improvements, establishing training programs and marketing the land. Grossman could also assist in the land marketing process.

A scenario for number 3 would find the CDC entering into a partnership with both EDIC and Grossman. Again, the CDC would be the managing partner. Grossman could maintain ownership of their land and lease it to the partnership. EDIC could purchase the remaining land and sell or lease it to the partnership. The CDC would install the necessary supporting facilities with EDA assistance. All three parties could participate in the marketing program. The CDC with help from EDIC could run the training program. Whether EDIC can participate in such a "for profit" venture is subject to question. If so, this would appear to be the ideal method of proceeding.

A scenario for number 4 would find the CDC operating as sole developer with or without assistance from EDIC. This would appear to be a difficult role and perhaps beyond the financial feasibility of the CDC.

Number 5 would eliminate the CDC as an owner-participant in the developer team but would probably involve the CDC in training programs, marketing activities and other activities related to job creation and improvements in employment opportunities.

The above alternatives 1 through 5 presume funding from one or more of the following sources, subject to the specific program direction:

Loan Assistance

EDIC bonding capacity
Private financing

Grant Assistance

EDA public works assistance
City public works assistance
State/Federal training assistance

The CDC's venture capital could be used as seed money and could also be invested in the project - the amount depending upon the availability of other funds and the risk involved. The CDC should seek to keep the use of these funds to a minimum since other sources are available. Other sources of capital investment could come from Grossman or other limited partners, if they become involved. There is also the possibility that stock could be sold to CDC stockholders or others to raise capital.

Preferred Role for the CDC

The CDC, through utilization of programs such as those mentioned above and in Section II is in an excellent position to combine its resources with those of EDIC and the private sector to serve the residents of East Boston. We would like to set forth and briefly discuss an approach that we believe is possible to achieve, and that represents a significant next step in local planning that may serve as a model for CDC's and other community service organizations.

Consider the resources and power represented by a consortium consisting of the CDC, EDIC, private firms who occupy the industrial park, and the several city, state, regional and Federal agencies who may help in the park development effort:

- o EDIC may purchase or lease the park land from its present owners and make it available to the CDC for industrial development. EDIC, in its role as manpower agency for the city may also make available manpower training programs and funds for use by East Boston residents.
- o The CDC may contract with EDIC to develop the park. To receive such designation the CDC should be prepared to contract with EDIC so that each party may have performance guarantees subject to redress if performance is not forthcoming.
- o Private firms will occupy the park and provide the employment opportunities for East Boston residents.

The CDC, as the managing and development organization of the consortium may deliberately design the industrial park to explicitly, and in a controlled manner, use the park to serve its charter purpose to enhance economic opportunities for the community. To achieve this, it will be helpful for it to make the following points to its consortium partners:

- o For EDIC, the CDC can serve as a capable partner to achieve EDIC's objective of stimulating industrial growth in the city, and improving the job opportunities and skills of the city's work force.
- o For private enterprise park tenants, the CDC is in a position to help them achieve goals commensurate with their developing sense of corporate social responsibility. Many private firms have declared themselves interested in taking action to preserve and increase fair profits. Good opportunities to achieve socially responsible goals without sacrificing profitability are not easy to find. The CDC is in a position to offer park tenants such an opportunity.

Given the physical development assistance, manpower training programs, financial assistance, and wage subsidies the CDC will have at its disposal, it may legitimately require potential tenants to cooperate with it in insuring that East Boston residents are employed unless a compelling reason to use a person from another community is evident. EBCDC may negotiate with such firms to set resident employment targets, and require that such targets be met as a condition of continued assistance, or even continued occupancy.

Given sufficient forethought and inquiry into the skills and occupations utilized by various firms EBCDC may tailor its tenant firms in a manner that residents have available within the park career ladders, or advancement opportunities by moving from firm to firm. EBCDC thus could include as a tenant a garment manufacturer to provide openings at an entry level.

Other tenants could be recruited that utilize assembly or other operations requiring semi-skilled and skilled operators. Residents employed in the garment firm could be guaranteed the right to apply for openings in these firms and receive serious consideration for employment. Thus, a series of firms could be conceived of in the same manner as one conceives a set of departments in a single firm, or single government jurisdiction.

The CDC could be the central personnel management office for the park as a whole and administer recruitment of residents for park tenant firms, keep personnel folders for resident employees, identify career or advancement ladders that include several firms in the park, arrange for consideration of residents as openings occur, and provide other administrative, personnel, and manpower services.

Given the resources available, and a willingness to work through problems that may arise in implementation of this concept, no tenant firm should find a location in the park less profitable than another location. The CDC (or an associated agency established by the CDC) could carry much of the administrative workload and provide other above described resources to cover any extra expense that may arise. Actually, tenant firms would probably find extra expense to be minimal. Their major contribution to this effort is a willingness to locate in the park, and a willingness to fit their personnel management practices to CDC's objective - the improvement of income and employment opportunities to East Boston residents. As long as EBCDC is reasonable and helpful in its relationship to these firms this should not be a burden.

Conclusions

We believe general economic forces in the city are sufficiently strong and positive to justify creation of an industrial park in East Boston. Further, certain special circumstances place the CDC in an excellent position to serve as developers of the park. Depending on the motives and resources of important outside organizations such as EDIC and firms in the private sector, and depending too on the ability of the CDC to conceive and execute a plan similar to the one set forth for park tenancy, the park should be a decided asset to East Boston.

Beginning A Program To Develop The Industrial Park

Should the CDC decide to begin a program to develop the industrial park certain actions are appropriate as an initial approach. In general the CDC should avoid an early commitment of major manpower and monetary resources. It should begin implementation with the attitude that the park appears feasible, given present information, but that the question of feasibility should remain open as long as possible. The CDC, thus, should delay investments that represent a total commitment to the park until it is reasonably certain that all essential funds are available and all essential promises have been made by others.

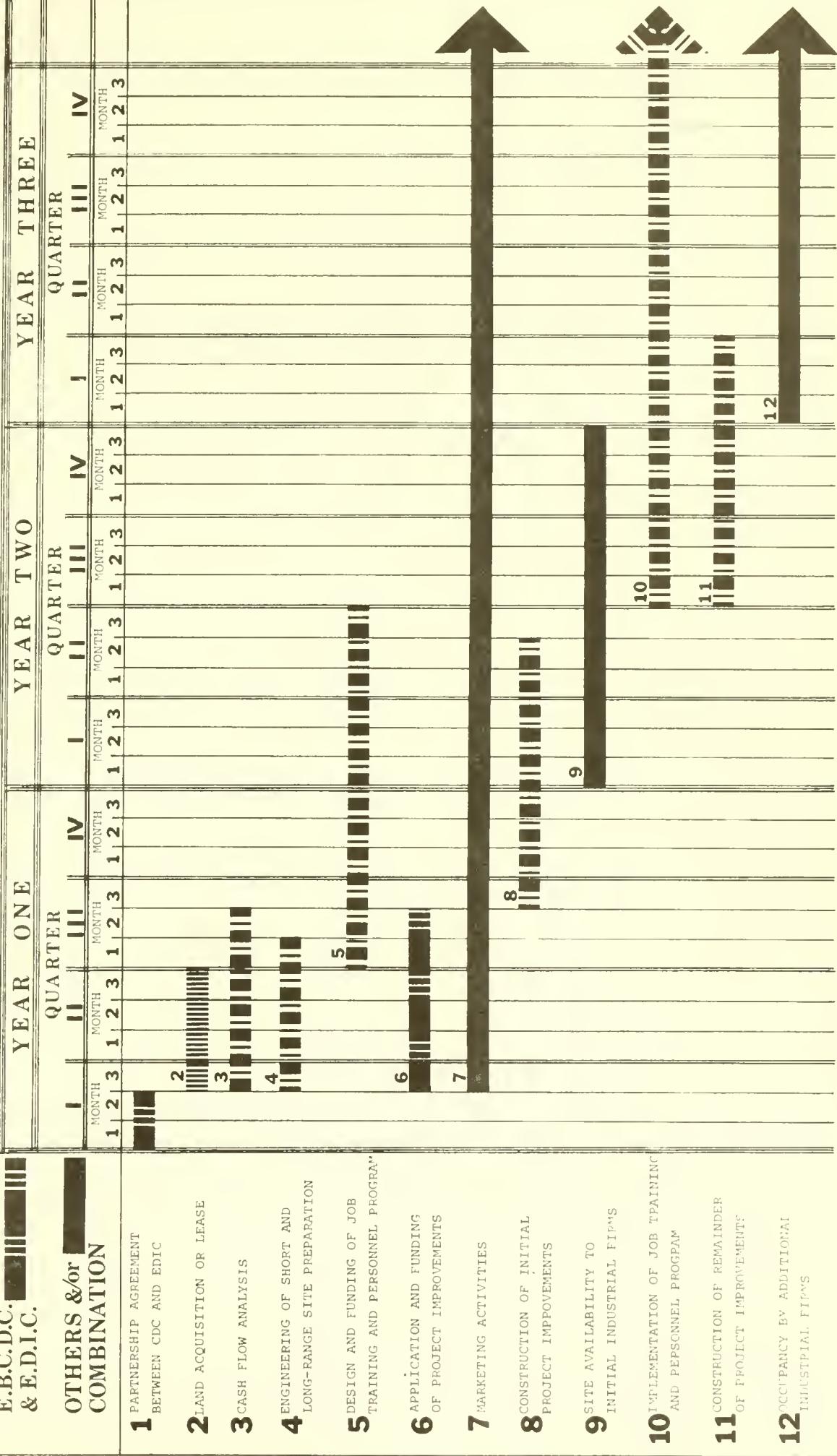
In the first phase of implementation the CDC should put together the assistance package it requires for site development and construction, for its own program administration, for support to participating business firms, for manpower training, and for other purposes. Thus, as soon as practicable, discussions should begin with EDIC to utilize its resources and powers. The CDC should offer to act as developers of the park for EDIC, and should indicate its willingness to sign a cooperation agreement outlining mutual role and responsibilities. At the same time, other government agencies such as HUD, DCA, and EDA should be approached to assess detailed fund availability and the extent of commitment from them that may be expected.

Pursuit of cooperative agreements with other government agencies should not delay the beginning of a search for

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East Boston Industrial Park

ILLUSTRATIVE SCHEDULE FOR DEVELOPMENT AND OCCUPANCY



tenants. The CDC should begin this search in a low keyed manner by conducting personal visits to local area (Greater Boston) firms to assess their general views about an East Boston location for industry, and their possible specific interest in the site. These approaches should be made at the top level (Board Chairmen or Chief Executive Officer) and the CDC should stress its unique role and purpose. Thus, it should make clear to private firms that it is working for the betterment of East Boston and the city, and that it is looking for firms for that reason. It should also state its concept of the industrial and commercial community it is developing and state the programs of assistance to cooperating firms it is putting together.

These initial steps should soon lead to the creation of a more precise work plan to develop the park. The CDC will know in a relatively short time (inside a year) whether the major resources it requires will be available and whether the major government agencies whose support it requires are interested in cooperating with the program. It will also know how its ideas and its site are viewed by private firms. If the prognosis in both sectors, public and private, is favorable the steps shown in the "illustrative schedule for development and occupancy" can proceed.

It will be important to re-evaluate this project from a financial viewpoint continuously as firm commitments become known so as to determine the extent of continuing interest by the CDC.

In summary, we believe that the extent of the CDC's participation as a partner in this venture will depend upon the exact risk involved. Most developers seek to invest as little of their own money as possible until firm signs of success appear. We recommend that the CDC take a positive attitude toward this project and continue to pursue a leading role in it. At the same time we feel that very little money should be invested by the CDC until outstanding questions of development assistance and financing are answered. Such questions can be fully answered only by further negotiations with EDIC, further engineering studies and negotiations with other parties such as the tax assessor, owners of the subject property and others.

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